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KINDER MORGAN
GENERAL DIV.
REMEDIATION BRANCH
(6SF-10)

January 7, 2013

Mr. Lance Nixon, Enforcement Officer
Superfund Enforcement Assessment Section (6SF-TE)
U.S. EPA, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

RE: Wilcox Oil Superfund Site
Bristow, Creek County, Oklahoma

RECEIVED
13 JAN -8 PM 2:18
SUPERFUND DIV.
REMEDIATION BRANCH
(6SF-10)

Dear Mr. Nixon:

Enclosed for your review is Kinder Morgan, Inc.'s (Kinder Morgan) response to the U.S. Environmental Protection Agency's (EPA) CERCLA 104(e) Information Request regarding the above referenced matter. EPA's CERCLA 104(e) Information Request was dated October 25, 2012 and on November 13, 2012, I requested an extension to respond to the 104(e) request. By letter dated November 16, 2012, received by my office on November 27, 2012, EPA granted Kinder Morgan's request for a 40-day extension. Pursuant to that extension, Kinder Morgan's response is due tomorrow January 8, 2013.

We have enclosed hard copies of our response and supporting documents. Also, enclosed is a CD containing electronic versions of all of the documents.

If you have any questions, please contact the undersigned at 303-914-4634 or nancy_vanburgel@kindermorgan.com. Thank you for your attention to this matter.

Sincerely,



Nancy E. Van Burgel, Esq.
Assistant General Counsel
Kinder Morgan, Inc.



**WILCOX OIL SUPERFUND SITE
INFORMATION REQUEST**

QUESTIONS

1. Please provide the full legal name, mailing address, and phone number of the Respondent.

RESPONSE:

Kinder Morgan, Inc.
1001 Louisiana St., Suite 1000
Houston, TX 77002
(713) 420-2600

2. For each person answering these questions on behalf of the Respondent provide full name, title, business address, and business telephone and fax number.

RESPONSE:

Nancy Van Burgel
Assistant General Counsel
370 Van Gordon Street
Lakewood, CO 80228
(303) 914-4634 (business); nancy_vanburgel@kindermorgan.com; 303-984-3333 (fax)

3. If the respondent wishes to designate an individual for all future correspondence concerning this Site, including legal notices, please provide the individual's name, address, telephone number, and fax number.

RESPONSE:

Nancy Van Burgel
Assistant General Counsel
370 Van Gordon Street
Lakewood, CO 80228
(303) 914-4634 (business); nancy_vanburgel@kindermorgan.com; 303-984-3333 (fax)

4. Identify all prior owners of the Site. For each prior owner, further identify the dates of ownership.

RESPONSE:

Pre-September 1963: It is our belief based on review of Oklahoma Department of Environmental Quality documents and USEPA documents that Wilcox Oil

Company was the original constructor, operator and owner of the Bristow refinery. [see Preliminary Assessment of the Wilcox Oil Company, prepared by the State of Oklahoma Department of Environmental Quality, December 15, 1994, Bates Nos. KMI-0000004 – 99 and Site Assessment Report for Wilcox Refinery, Bristow, Creek County, Oklahoma, March 1999, prepared by Ecology and Environment, Inc., Table 2-1, page 2-7, Bates Nos. KMI0000101-178.

September 1963: Wilcox Oil Company sold the refinery to Wendel Sandlin of Sandlin Oil & Refining Co. [Bureau of Mines/Minerals Yearbook Area Reports: Domestic 1963, Year 1963, Volume III (1964)] Bates Nos. KMI0000001-3.

Also see Plan of Reorganization By and Between Wilcox Oil Company, Tennessee Gas Transmission Company and WXC Company, Dated May 13, 1964, Bates Nos. W0000460-593, Exhibit A – Pages 2-3, Bates Nos. W0000479-480 Wilcox Oil Company, Statement of Income and Retained Earnings, Years ended December 31, 1963 and 1962; Note reference to sale of refinery on both referenced pages.

5. Explain the corporate relationship between Wilcox Oil Company, Tenneco Oil Company, EPEC Oil Company, El Paso Corporation, and Kinder Morgan.

RESPONSE:

Wilcox Oil Company

Wilcox Oil Company was a Delaware corporation qualified to do business in the state of Oklahoma and numerous other states [see Copy of Certification of Incorporation of H.F. Wilcox Oil & Gas Company, Bates Nos. W0000656]. It sold its Bristow Refinery to Wendel Sandlin in 1963. It retained oil and gas leases and oil producing properties.

On May 4, 1964, Tennessee Gas Transmission Company, a Delaware corporation, formed WXC Company, a Delaware corporation, as a wholly-owned subsidiary of Tennessee Gas Transmission Company. Later that month, Wilcox Oil Company, WCX Company and Tennessee Gas Transmission Company entered into a Plan of Reorganization by and between Wilcox Oil Company, WCX Company and Tennessee Gas Transmission Company. [see Plan of Reorganization dated May 13, 1964, Bates Nos. W0000460-593]. According to the Plan of Reorganization, WXC Company acquired all of the assets of Wilcox Oil Company, except for the corporate charter, by-laws, stock books and minute books and an amount of cash retained in order to pay expenses of Wilcox Company required for its liquidation and dissolution.[see Plan of Reorganization (May 13, 1964, Bates Nos. W0000460-593) and General Conveyance and Assumption Agreement, dated July 21, 1964, Bates Nos. W0000002-5 and W0000296-410]

On the same date, July 21, 1964, WXC Company changed its name to Wilcox Oil Company.

Tennessee Gas Transmission Company (TGT) was the parent of Tenneco Corporation and was publicly traded. Tenneco Corporation was a wholly owned subsidiary of TGT and was a holding company that owned stock for all of Tenneco Corporation's non-regulated subsidiaries. Tennessee Oil Refining Corporation, later known as Tenneco Oil Company, was a subsidiary of Tenneco Corporation.[see Bates Nos. EPR 0001199-1201]

Tenneco Oil Company

On September 7, 1964, Wilcox Oil Company merged into Tenneco Oil Company. [see Corporate Records of Tennessee Oil Refining Corporation, Certificate of Amendment of Certificate of Incorporation of Tennessee Oil Refining Corporation, dated November 17, 1960, Bates Nos. EPR0001199-1201] and [see Corporate Records of Tennessee Oil Refinery Corporation Certificate of Ownership and Merger, Bates Nos. EPR 0001226-1229.

EPEC Oil Company

In 1996, Tenneco Oil Company was one of the subsidiaries acquired by El Paso Energy Corporation and was renamed EPEC Oil Company. [see Corporate Records of Tennessee Oil Refining Corporation, State of Delaware, Office of Secretary of State Certificate dated December 24, 1996; and Certificate of Amendment of Certificate of Incorporation dated December 12, 1996. Bates Nos. ERR0001319 – 1320; and Amended and Restated Plan of Merger, dated, June 19, 1996, Bates Nos. KMI0000225-561]

On December 18, 1998, EPEC Oil Company dissolved pursuant to Delaware law. [see State of Delaware, Office of Secretary of State Certification dated December 18, 1998, Bates No. EPR0001321; and Certificate of Dissolution of EPEC Oil Company by Written Consent of Sole Stockholder, Bates Nos. EPR0001322-1325.

On March 9, 2001, the EPEC Oil Company Liquidating Trust Agreement was entered into among EPEC Oil Company as Trustor and El Paso Energy E.S.T. Company, a Delaware corporation, as Trustee. [see EPEC Oil Company Liquidating Trust Agreement, Bates Nos. KMI0000179-208]

El Paso Corporation

Tenneco Oil Company, as a subsidiary of Tenneco Corporation, was one of the Tenneco Energy Group Companies purchased and then distributed by El Paso Natural Gas Company pursuant to Amended and Restated Agreement and Plan of

Merger, dated June 19, 1996 [see Bates Nos. KMI0000225 – 561]. El Paso Energy Corporation was incorporated in April 17, 1998 and changed its name to El Paso Corporation on February 7, 2001 [see Certificate of Incorporation of El Paso Energy Corporation, dated April 15, 1998, Bates Nos. KMI0000562 – 571; and, Certificate of Incorporation of El Paso Corporation, dated February 5, 2001, Bates Nos. KMI0000572 – 615].

Kinder Morgan, Inc. (KMI)

On May 25, 2012, Kinder Morgan Inc. completed the acquisition of El Paso Corporation. Following the completion of these transactions, El Paso Holdco LLC became a direct, wholly owned subsidiary of KMI and El Paso LLC became a direct, wholly owned subsidiary of El Paso Holdco LLC. [see United States Securities and Exchange Commission, Form 8-K, dated May 24, 2012 for Kinder Morgan, Inc.; and United States Securities and Exchange Commission, Form 8-K, dated May 24, 2012, for El Paso Holdco LLC., Bates Nos. KMI0000209 - 224].

6. Provide all documents related to the sale/transfer of the Wilcox Refinery, the purchase of Wilcox Oil Company by WCX Company, and the merger of Wilcox Oil with Tenneco Oil Company.

RESPONSE:

Please see documents referenced in Responses to Questions 4 and 5, above, including,

(1) *Preliminary Assessment of Wilcox Oil Company*, dated December 15, 1994 including Quit Claim Deed and Warranty Deeds; Bates Nos. KMI0000096 – 99; *Site Assessment Report*, dated March 1999 including Table 2-1, Bates No. KMI0000117.

(2) Plan of Reorganization by and between, Wilcox Oil Company, WCX Company and Tennessee Gas Transmission Company, dated May 13, 1964; Bates Nos. W0000460 – 593.

(3) Certificate of Amendment of Certificate of Incorporation of Tennessee Oil Refining Corporation, Bates Nos. EPR0001226 – 1229.

7. Provide documents related to the dissolution of EPEC Oil.

RESPONSE:

Please see Certificate from the State of Delaware, Office of Secretary of State, Bates No. EPR0001321 and Certificate of Dissolution of EPEC Oil Company by Written Consent of Sole Stockholder, dated December 16, 1998, Bates Nos. EPR0001322 – EPR0001325.

8. For the EPEC Oil Liquidating trust;
- a. State the year the trust was created;
 - b. If the trust no longer exists, state the year the trust was terminated, dissolved, or liquidated; and to whom the trust was distributed;
 - c. If the trust no longer exists, state the net worth of the trust at the time of termination; and the dollar value of the assets distributed.

RESPONSE:

- a. The Trust was created in 1998.
 - b. The Trust continues to exist according to the terms of the Trust.
 - c. See above.
9. If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available. We have provided all corporate records that we could locate.

RESPONSE:

We have provided all corporate records that we could locate. We will supplement this response, should any additional corporate records are located.

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

C O P Y
OF
CERTIFICATE OF INCORPORATION
OF
H. F. WILCOX OIL & GAS COMPANY

CERTIFICATE OF INCORPORATION
OF
H. F. WILCOX OIL & GAS COMPANY

FIRST. The name of this corporation is

H. F. WILCOX OIL & GAS COMPANY.

SECOND. Its principal office and place of business in the State of Delaware is to be located at 7 West Tenth Street, in the City of Wilmington, County of New Castle. The agent in charge thereof is the Delaware Charter Guarantee & Trust Company, 7 West Tenth Street, Wilmington, Delaware.

THIRD. The nature of the business and the objects and purposes proposed to be transacted, promoted and carried on, are to do any or all of the things herein mentioned, as fully and to the same extent as natural persons might or could do and in any part of the world, viz:

(1) To purchase, lease or otherwise acquire lands believed to contain oil, gas or other minerals, and all real estate necessary for the purposes of this corporation, and to mortgage, sell or otherwise dispose of said real estate or leases or interest therein.

(2) To prospect for and mine oil, gas and other minerals.

(3) To contract for the drilling of oil and gas wells, and the digging and mining of all other mineral property.

(4) To drill, bore or otherwise develop and maintain oil and gas or other mineral property or properties.

(5) To buy, lay, construct, maintain, operate or sell buildings, tanks, pipe lines, machinery, equipment, tools, reservoirs, refineries, smelters, crushers, and mills necessary for the production, preservation, refining, manufacture, smelting, milling, marketing and transportation of oil, gas or other minerals, and the products thereof.

(6) To purchase and sell oil, gas and other minerals, and all products of the same.

(7) To own, buy, sell, maintain and operate filling and distributing stations, and to retail and deal generally in all kinds of oil and gas and the by-products thereof.

To take, own, hold, deal in, mortgage or otherwise lien, and to lease, sell, exchange, transfer, or in any manner whatever dispose of real property, within or without the State of Delaware, wherever situated.

To manufacture, purchase, or acquire in any lawful manner, and to hold, own, mortgage, pledge, sell, transfer, or in any manner dispose of, and to deal and trade in goods, wares, merchandise, and property of any and every class and description, and in any part of the world.

To acquire the good will, rights and property, and to undertake the whole or any part of the assets or liabilities of any person, firm, association or corporation; to pay for the same in cash, the stock of this company, bonds or otherwise; to hold or in any manner to dispose of the whole or any part of the property so purchased; to conduct in any lawful manner the whole or any part of any business so acquired and to exercise all the powers necessary or convenient in and about the conduct and management of such business.

To apply for, purchase, or in any manner to acquire, and to hold, own, use and operate, or to sell or in any manner dispose of, and to grant license or other rights in respect of, and in any manner deal with, any and all rights, inventions, improvements and processes used in connection with or secured under letters patent or copyrights of the United States or other countries, or otherwise and to work, operate or develop the same, and to carry on any business, manufacturing or otherwise, which may be deemed to directly or indirectly effectuate these objects or any of them.

To guarantee, purchase, hold, sell, assign, transfer, mortgage, pledge or otherwise dispose of, the shares of the capital stock of, or any bonds, securities or evidences of indebtedness issued or created by any other corporation or corporations of this State or any other State, country, nation or government, and while owner of said stock may exercise all the rights, powers and privileges of ownership, including the right to vote thereon, to the same extent as natural persons might or could do.

To enter into, make and perform contracts of every kind with any person, firm, association or corporation, municipality, body politic, county, territory, State, Government or Colony or dependency thereof, and without limit as to the amount to draw, make, accept, endorse, discount, execute and issue promissory notes, drafts, bills of exchange, warrants, bonds, debentures, and other negotiable or transferable instruments and evidence of indebtedness, whether secured by mortgages or otherwise, as well as to secure the same by mortgage or otherwise, so far as may be permitted by the laws of the State of Delaware.

To have offices, conduct its business and promote its objects within and without the State of Delaware, in other States, the District of Columbia, the territories and Colonies of the United States, and in foreign countries, without restriction as to place or amount.

To purchase, hold, cancel and re-issue the shares of its capital stock.

To do any or all of the things herein set forth to the same extent as natural persons might or could do, and in any part of the world, as principals, agents, contractors, trustees, or otherwise, and either alone or in company with others.

IN GENERAL, to carry on any other business in connection therewith, whether manufacturing or otherwise, not contrary to the laws of the State of Delaware, and with all the powers conferred upon corporations by the laws of the State of Delaware,

FOURTH. The amount of the total authorized capital stock of this Corporation is Two Million Dollars, (\$2,000,000.00) divided into four hundred thousand shares, of Five Dollars (\$5.00) each,

The amount of capital stock with which it will commence business is Fifteen Hundred Dollars (\$1500.00) being three hundred shares of Five Dollars (\$5.00) each.

FIFTH. The names and places of residence of each of the original subscribers to the capital stock are as follows:-

NAME.	RESIDENCE
H. F. Wilcox,	Tulsa, Oklahoma.
G. A. Dye,	Tulsa, Oklahoma.
L. V. Crater,	Tulsa, Oklahoma.

SIXTH. The existence of this Corporation is to be perpetual.

SEVENTH. The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatever.

EIGHTH. The Directors shall have power to fill all vacancies in the Board of Directors, to make and to alter or amend the By-Laws, to fix the amount to be reserved, and to authorize and cause to be executed mortgages and liens, without limit as to the amount, upon the property and franchises of this Corporation.

The Directors may, by resolution passed by a majority of the whole Board, designate two or more of their member to constitute an Executive Committee, who to the ex-

tent provided in said resolution or in the By-Laws of said Company, shall have and exercise the powers of the Board of Directors in the management of the business and affairs of the Company, and may have power to authorize the seal of the Company to be affixed to all papers which may require it.

The Directors may, by a vote of the stockholders, be divided into one, two or three classes; the term of office of the first class to expire at the annual meeting next ensuing; of the second class one year thereafter; of the third class two years thereafter; and at each annual election, held after such classification and election, Directors shall be chosen for a full term, as the case may be, to succeed those whose terms expire.

With the consent in writing, and pursuant to an affirmative vote of the holders of a majority of the capital stock issued and outstanding the Directors shall have authority to dispose, in any manner, of the whole property of this Corporation.

The By-Laws shall determine whether and to what extent the accounts and books of this Corporation or any of them, shall be open to the inspection of the stockholders; and no stockholder shall have any right of inspecting any account, or book or document of this Corporation, except as conferred by Law or the By-Laws, or by resolution of the stockholders or Directors.

The Stockholders and Directors shall have power to hold their meetings and keep the books, documents and papers of the Corporation outside the State of Delaware, at such places as may be from time to time designated by the By-Laws, except as otherwise required by the laws of Delaware.

This corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by the statutes of the State of Delaware, and all rights conferred on officers, Directors and Stockholders are

granted, subject to this reservation.

It is the intention that the objects, purposes and powers specified in the third paragraph hereof shall, except where otherwise specified in said paragraph, be nowise limited or restricted by reference to or inference, from the terms of any other clause or paragraph of this Certificate of Incorporation, but that the objects, purposes and powers specified in the third paragraph and in each of the clauses or paragraphs of this charter shall be regarded as independent objects, purposes and powers.

WE, THE UNDERSIGNED, being each of the original subscribers to the capital stock hereinbefore named for the purpose of forming a corporation to do business both within and without the State of Delaware, and in pursuance of an Act of the Legislature of the State of Delaware, entitled "An Act providing a General Corporation Law (approved March 10th, 1899), and the acts amendatory thereof and supplemental thereto, do make and file this Certificate, and declare that the facts herein stated are true, and we have accordingly hereunto set our respective hands and seals this 30th day of October, A. D. 1918.

H. F. Wilcox (SEAL)

G. A. Dye, (SEAL)

L. V. Crater, (SEAL)

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

STATE OF OKLAHOMA }
 }SS
COUNTY OF TULSA }

BE IT REMEMBERED, That on this 30th day of
October, A. D., 1918, personally appeared before me, the
subscriber, a Notary Public in and for the State and
County aforesaid, H. F. Wilcox, C. A. Dye and L. V.
Grater, parties to the foregoing Certificate of Incorpora-
tion, known to me personally to be such, and I have first
made known to them and to each of them the contents of said
certificate, they did each severally acknowledge that they
signed, sealed and delivered the same as their several
voluntary act and deed, and that the facts therein stated
were truly set forth.

GIVEN under my hand and seal of office the day
and year aforesaid.

Ella Bailey

Notary Public.

* Ella Bailey *
* Notary Public *
** Tulsa County, Okla. *

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

STATE OF DELAWARE

Office of Secretary of State.

I, A. R. Benson, Secretary of State of Delaware
do hereby certify that the above and foregoing is a true and
correct copy of Certificate of Incorporation of the "H. F.
WILCOX OIL & GAS COMPANY", as received and filed in this
office the fourth day of November, A. D., 1916, at 9 o'clock
A. M.

IN TESTIMONY WHEREOF, I have
heretunto set my hand and official
seal, at Dover, this thirteenth
day of November in the year of our
Lord one thousand nine hundred and
twenty-four.

(SIGNED) A. R. BENSON,

Secretary of State.

*
* SEAL *
*

H. F. WILCOX OIL & GAS CO.
TULSA, OKLA.

Form 6-A

BY-LAWS
OF
H. F. WILCOX OIL & GAS
C O M P A N Y

ORGANIZED UNDER THE LAWS OF THE
STATE OF DELAWARE

OFFICE IN DELAWARE WITH THE
DELAWARE CHARTER
GUARANTEE & TRUST COMPANY
WILMINGTON, DELAWARE

H. F. WILCOX OIL & GAS CO.
TULSA, OKLA.

BY-LAWS
OF
H. F. WILCOX OIL & GAS
C O M P A N Y
OFFICE IN DELAWARE WITH THE
DELAWARE CHARTER GUARANTEE & TRUST COMPANY
WILMINGTON, DELAWARE

NAME

1. The title of this corporation is H. F. Wilcox Oil & Gas Company.

OFFICE

2. The principal office of this corporation in Delaware shall be in Wilmington, Delaware, and it shall there be represented by the Delaware Charter Guarantee & Trust Company.

SEAL

3. The corporate seal of this corporation shall have inscribed thereon the name of this corporation and the year of its creation and the words, "Corporate Seal, Delaware."

STOCKHOLDERS' MEETINGS

4. (a) The annual meetings of Stockholders shall be held at the office of the Company, in the City of Tulsa, State of Oklahoma, on the first Tuesday of December in each year at ten o'clock in the forenoon, when they shall by plurality vote elect a Board of Directors for the ensuing year.

The polls shall remain open from nine o'clock in the forenoon until five o'clock in the afternoon.

A majority in amount of the stock issued and outstanding shall constitute a quorum for an election or for the transaction of other business.

(b) Each Stockholder shall be entitled to one vote, either in person or by proxy, for each share of stock registered in his name on the books of the corporation for twenty days preceding the meeting.

(c) Notice of the meetings and the conduct of the same shall be as prescribed by the Board of Directors.

(d) Special meetings of the Stockholders shall be held at the place prescribed for the annual meetings, unless otherwise ordered by the Board of Directors, and shall be called by the Secretary on the written request of two Directors, or on the written request of the owners of a majority of the stock, by notice given to each Stockholder at least three days prior to such meetings. Such notice shall briefly state the objects of such meetings, and no other business shall be transacted at such meeting.

DIRECTORS

5. (a) The property and business of this corporation shall be managed by a Board of at least seven directors, and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified.

(b) The Board of Directors may at any regular or special meeting increase its number by electing additional members to hold office until the next meeting of Stockholders or until their successors shall be elected.

(c) Regular meetings of the Directors shall be held at the office of the Company, in the City of Tulsa, State of Oklahoma, on the fourth Wednesday of each month at eleven o'clock in the forenoon, unless otherwise ordered by the Board.

(d) Notice of regular meetings shall be given to each Director by the Secretary at least two days previous thereto.

(e) Special meetings shall be held at the place prescribed for the regular meetings, unless otherwise ordered by the Board, and may be called by the President on his own motion on one day's notice to each Director.

(f) Special meetings shall be called in like manner by the President upon the written request of two members of the Board. All calls for special meetings shall briefly state the objects of said meetings and no other business shall be transacted at such meetings.

(g) At any meeting of the Board four (4) of the members elected and qualified shall constitute a quorum for the transaction

of business, but a less number may adjourn.

(h) The Board of Directors shall have power to elect or appoint all necessary officers and committees, to employ agents, factors, clerks and workmen, to require any of them to give such bond for the faithful discharge of their duties as may be deemed wise, to fix their compensation, to prescribe their duties, to dismiss any appointed officer or employee, and generally to control all officers of the corporation.

(i) The Board may delegate to any committee such powers as to the Board may seem wise.

(j) The Board of Directors, in addition to the powers and authority expressly conferred upon them by these By-Laws, may exercise all such powers and do all such things as may be exercised or done by the corporation, but subject, nevertheless, to the provisions of the law, of the charter and of these By-Laws.

(k) The order of business at the meetings of the Board shall be as follows:

1. A quorum being present, the President shall call the Board to order.
2. The minutes of last meeting shall be read and considered as approved, if there is no amendment offered.
3. Reports of officers.
4. Reports of committees.
5. Unfinished business.
6. Miscellaneous business.
7. New business.

OFFICERS

6. The executive officers of the Company shall be a President, one or more Vice-Presidents, a Secretary, a Treasurer, a General Counsel, and such other officers as may be from time to time elected or appointed by the Board of Directors; the Secretary and Treasurer may or may not be the same person, and the Vice-President may, if deemed advisable by the Board of Directors, hold the offices of Vice-President and Treasurer, or Vice-President and Secretary, but

not the offices of Vice-President, Secretary and Treasurer.

PRESIDENT

7. The President shall be a member of the Board of Directors, and he shall be the chief executive officer of the Company and shall exercise general supervision and administration over all its affairs. He shall, when present, preside at all meetings of the stockholders and directors and shall appoint all special or other committees, except the Executive Committee, unless otherwise ordered by the Board of Directors. He shall, with the Treasurer, sign all certificates of shares of the capital stock of the Company. He shall sign or countersign, as may be necessary, all such bills, notes, checks, contracts and other instruments as may pertain to the business and affairs of the Company, and he shall sign, when duly authorized, all contracts, orders, deeds, liens, licenses and other instruments of a special nature. He shall, as far as may be possible and desirable, familiarize himself with and exercise supervision over the affairs of this or any other corporation in which this corporation may be interested.

VICE-PRESIDENT

8. The Vice-President of the Company shall, in the absence, disability, or refusal to act of the President, be vested with all the powers of the President, and shall be required to perform all his duties. He shall perform such other duties as may be prescribed by the Board of Directors.

SECRETARY

9. The Secretary shall be sworn to the faithful discharge of his duties and shall keep full minutes of all the meetings of the stockholders and of the Board of Directors, and shall perform the same duty for the standing committees when required. He shall issue all calls for meetings of the stockholders and directors and shall notify all officers and directors of their election. He shall have charge of the seal of the corporation and affix the same to the certificates of stock when such certificates are signed by the President and Treasurer and shall affix the seal, attested by his signature, to such

other instruments as may require the same. He shall have charge of the stock certificate books, stock transfer books, and stock ledgers, and such other books and papers as the Board of Directors may place in his charge. He shall make such reports to the Board of Directors as they may require, and he shall also prepare such reports and statements as may be required by the provisions of the law.

TREASURER

10. The Treasurer shall be the custodian of all the funds and securities of the Company and shall keep full and accurate records and accounts in books provided for that purpose of all receipts, disbursements, credits, assets, liabilities and general financial transactions of the Company. He shall endorse for collection or deposit, to the credit of the Company, all bills, notes, checks and other negotiable instruments of the Company coming into his hands in such depositories and safe deposits as may be designated by the Board of Directors. He shall disburse the funds of the Company as may be ordered by the specific instructions of the Board of Directors or Executive Committee, taking proper vouchers for all such disbursements, and he shall give bond to the Company in such sum and with such surety as shall be satisfactory to the proper officers of the Company.

GENERAL COUNSEL

11. The General Counsel shall be the chief consulting officer of the Company in all legal matters, and he shall inspect and pass upon such instruments presented to the Company as may be of sufficient importance to justify such examination. He shall also advise with the officers of the Company in all such legal matters pertaining to the affairs of the Company as may require his consideration.

OFFICER PRO TEM

12. In the absence of any officer, the Board of Directors may delegate his powers and duties to any other officer, or to any Director, for the time being.

COMMITTEES

13. Standing and special committees shall have such powers and perform such duties as the Board of Directors may prescribe.

STOCK

14. The stock of the corporation shall be issued, transferred, cancelled and replaced in accordance with such rules as the Board of Directors shall prescribe.

INSPECTION OF BOOKS AND ACCOUNTS

15. No Stockholder, owning less than two hundred shares of the capital stock of this corporation, unless said Stockholder shall be a director of this corporation, shall be allowed to examine the books and accounts of this corporation, except by a resolution of the Board of Directors.

WAIVER OF NOTICE

16. Any Stockholder, Officer, or Director, may at any time waive any notice required to be given under these By-Laws.

NOTICE

17. Whenever under the provisions of these By-Laws notice is required to be given to any Director, Officer, or Stockholder, it shall not be construed to be limited to personal notice, but such notice may be given in writing by depositing the same in the postoffice or letter-box in a postpaid, sealed wrapper, addressed to such Director, Officer, or Stockholder, at his or her address, as the same appears in the books of the corporation, and the time when the same shall be mailed shall be deemed to be the time of the giving of such notice.

ALTERATION AND AMENDMENT

18. The Board of Directors may, by a majority vote of the whole Board, alter or amend these By-Laws at any regular meeting or at any special meeting, provided notice of such alteration or amendment has been given to each Director at least three days prior to said meeting.

DEFERRED MEETINGS

19. If any meeting provided for in these By-Laws should fall upon a Legal Holiday, the same shall be held upon the next succeeding business day at the same hour and place.

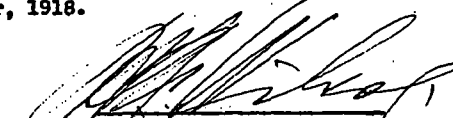
January, 1918.

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

I hereby certify that I am the Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company, and as such Secretary-Treasurer have custody of the books and records of said corporation, and that the foregoing is a true and correct copy of the By-Laws of the said H. F. Wilcox Oil & Gas Company, adopted at the first meeting of the incorporators and subscribers of the capital stock of the H. F. Wilcox Oil & Gas Company, held at the office of the Delaware Charter Guaranty & Trust Company, Wilmington, Delaware, at ten o'clock in the forenoon of Tuesday, the 5th day of November, 1918, for the management of the Company's property and the regulations and government of its affairs. On motion duly made, seconded and carried, each of the Articles was separately adopted. Thereupon on motion duly made, seconded and carried, the By-Laws were adopted as a whole and were ordered to be entered in full in the minutes of the meeting.


Secretary-Treasurer.

I, H. F. Wilcox, President, Director of the said H. F. Wilcox Oil & Gas Company, do hereby certify that the foregoing is a correct copy of the By-Laws as adopted at the first meeting of the incorporators on the 5th day of November, 1918.


President-Director.

Dated at Tulsa, Oklahoma,
May 7, 1925.

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

MEETING OF THE
DIRECTORS
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma

November 27, 1918.

EXTRACT

Mr. Joseph K. Lipscomb offered the following resolution:

WHEREAS, Section (a) of Article 5 of the By-Laws of this Company provides:

"The property and business of this corporation shall be managed by a Board of at least seven (7) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

NOW, THEREFORE, be it resolved that said Section (a) of Article 5 of said by-laws be, and the same is hereby amended so as to read as follows:

"The property and business of this corporation shall be managed by a Board of at least eleven (11) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

On motion made by Mr. H. H. Gillpatrick and seconded by Mr. L. E. Sears, the foregoing resolution was adopted by unanimous vote of the Directors and ordered incorporated in the minutes of this meeting.

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

MEETING OF THE DIRECTORS
OF
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma.

December 26, 1918.

EXTRACT

* * * * *

Mr. G. A. Dye offered the following resolution:

WHEREAS, Section (a) of Article 5 of the By-laws
of this Company provides:

"The property and business of this corporation
shall be managed by a Board of at least eleven
(11) Directors and they shall hold office until
the next annual meeting of the Stockholders,
or until their successors are elected and quali-
fied."

NOW, THEREFORE, be it resolved that said Section
(a) of Article 5 of said by-laws be, and the same is hereby amended so
as to read as follows:

"The property and business of this corpora-
tion shall be managed by a Board of at
least twelve (12) Directors and they shall
hold office until the next annual meeting
of the Stockholders, or until their success-
ors are elected and qualified."

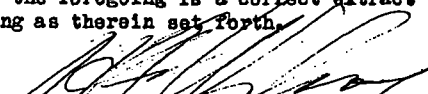
On motion made by Mr. L. E. Sears and seconded by
Mr. G. A. Dye, said resolution was unanimously adopted by the
Directors and ordered incorporated in the minutes of this meeting.

* * * * *

I hereby certify that I am Secretary-Treasurer of
the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer
have custody of the books and records of said Corporation; and that
the foregoing is a true and correct copy of an extract from the
minutes of a meeting of the Board of Directors of the said H. F.
Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corpora-
tion do hereby certify that the foregoing is a correct extract
from the minutes of a meeting as therein set forth.


President-Director.

H. F. WILCOX OIL & GAS CO.
TULSA, OKLA.

MEETING OF THE DIRECTORS

OF

H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma.

February 26, 1919.

EXTRACT

* * * * *

Mr. D. Ross Wynn offered the following resolution:

WHEREAS, Section (a) of Article 5 of the By-laws of this Company provides:

"The property and business of this corporation shall be managed by a Board of at least twelve (12) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

NOW, THEREFORE, be it resolved that said Section (a) of Article 5 of said by-laws, be, and the same is hereby amended so as to read as follows:

"The property and business of this corporation shall be managed by a Board of at least fourteen (14) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

On motion made by Mr. Joseph K. Lipscomb and seconded by Mr. J. Edward Horn, said resolution was unanimously adopted by the Board of Directors and ordered incorporated in the minutes of this meeting.

* * * * *

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

MEETING OF THE DIRECTORS
OF
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma

December 1, 1919

EXTRACT

Mr. D. Ross Wynn offered the following resolution:

WHEREAS, Section (a) of Article 5 of the By-laws of this Company provides:

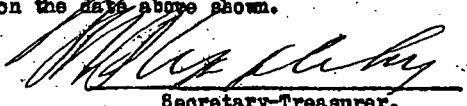
"The property and business of this corporation shall be managed by a Board of at least fourteen (14) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

NOW, THEREFORE, be it resolved that said Section (a) of Article 5 of said by-laws be, and the same is hereby amended so as to read as follows:

"The property and business of this corporation shall be managed by a Board of at least fifteen (15) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

On motion made by Mr. J. Edward Horn and seconded by Mr. L. E. Sears, said resolution was unanimously adopted by the Board of Directors and ordered incorporated in the minutes of this meeting.

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

H. F. WILCOX OIL & GAS CO.
TULSA, OKLA.

ANNUAL MEETING OF THE STOCKHOLDERS
OF THE
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma.

December 2, 1919.

EXTRACT

A Resolution was offered by H. F. Wilcox, whereby the time of meeting of the Directors be changed from the fourth Wednesday of each month to the first Monday of each month, which resolution was in words and figures as follows:

RESOLUTION

WHEREAS Section "C" of Article 5 of the By-Laws of this company reads and provides, as follows: "Regular meetings of the Directors shall be held at the office of the Company, in the City of Tulsa, State of Oklahoma, on the fourth Wednesday of each month at 11 o'clock in the forenoon, unless otherwise ordered by the Board."

NOW THEREFORE BE IT RESOLVED, That said Section "C" of Article 5 of the said By-Laws, be and hereby is amended to read and provide as follows: "Regular meetings of the Directors shall be held at the office of the company, in the City of Tulsa, State of Oklahoma, on the first Monday of each month at 11 o'clock in the forenoon, unless otherwise ordered by the Board."

On motion made by J. Edw. Horn, seconded by J. Wm. Everhart, which motion was duly carried in the vote, this resolution was accepted and adopted and ordered spread on the minutes of the meeting.

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

MEETING OF THE

DIRECTORS

H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma,

December 6, 1921.

EXTRACT

Mr. A. W. Ellenberger offered the following resolution:

WHEREAS, Section (a) of Article 5 of the By-Laws of this Company provides:

"The property and business of this corporation shall be managed by a Board of at least fifteen (15) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

NOW, THEREFORE, be it resolved that said Section (a) of Article 5 of said by-laws, be, and the same is hereby amended so as to read as follows:

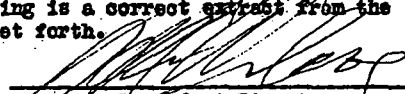
"The property and business of this corporation shall be managed by a Board of at least fourteen (14) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

On motion made by Mr. B. G. Tucker and seconded by Mr. H. H. Gillpatrick, said resolution was unanimously adopted by the Board of Directors and ordered incorporated in the minutes of this meeting.

I hereby certify that I am Secretary-Treasurer of the H. F. WILCOX OIL & GAS COMPANY and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

ANNUAL MEETING OF THE STOCKHOLDERS
OF THE
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma.

December 6, 1921.

EXTRACT

A Resolution was offered by A. W. Ellenberger, which was in words and figures as follows:

WHEREAS, Article 4 (a) of the By-Laws of the H. F. Wilcox Oil & Gas Company reads as follows:

"The annual meetings of the Stockholders shall be held in the office of the Company, in the City of Tulsa, State of Oklahoma, on the first Tuesday of December in each year, at ten o'clock in the forenoon, when they shall by plurality vote elect a Board of Directors for the ensuing year. The polls shall remain open from nine o'clock in the forenoon until five o'clock in the afternoon," and

WHEREAS, It now appears to be to the best interest of the Company that the date of said annual stockholders meeting be changed to some date in the Spring of each year,

BE IT THEREFORE RESOLVED, that said Article 4 (a) of the By-Laws of the H. F. Wilcox Oil & Gas Company be and is hereby amended to read:

"The annual Meetings of the Stockholders shall be held in the office of the Company, in the City of Tulsa, State of Oklahoma, on the first Tuesday after the first Monday of April in each year at ten o'clock in the forenoon, when they shall by plurality vote elect a Board of Directors for the ensuing year. The polls shall remain open from ten o'clock in the forenoon until twelve o'clock noon," and

BE IT FURTHER RESOLVED, That the next Annual Stockholders' Meeting, after this present meeting is adjourned, shall be held on the first Tuesday after the first Monday in April, 1923.

Seconded by C. L. Ayers. Question. Vote. Carried.

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have the custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

H. F. WILCOX OIL & GAS CO.
TULSA, OKLA.

MEETING OF THE
DIRECTORS
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma

April 4, 1922.

EXTRACT

Mr. Frank Hagenberg offered the following resolution:

WHEREAS, Section (a) of Article 5 of the By-Laws of this Company provides:

"The property and business of this corporation shall be managed by a Board of at least fourteen (14) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified;"

NOW, THEREFORE, be it resolved that said Section (a) of Article 5 of said by-Laws be, and the same is hereby amended so as to read as follows:

"The property and business of this corporation shall be managed by a Board of at least sixteen (16) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

On motion made by Mr. H. J. Cassady, and seconded by Mr. B. C. Tucker, said resolution was unanimously adopted by the Board of Directors and ordered incorporated in the minutes of this meeting.

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

H. F. WILCOX OIL & GAS CO.
TULSA, OKLA.

MEETING OF THE DIRECTORS
OF
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma,

April 2, 1923.

EXTRACT

* * * * *

Mr. C. E. Holt offered the following resolution:

WHEREAS, Section (a) of Article 5 of the By-Laws of this Company provides:

"The property and business of this corporation shall be managed by a Board of at least sixteen (16) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

NOW, THEREFORE, be it resolved that said Section (a) of Article 5 of said by-laws be, and the same is hereby amended so as to read as follows:

"The property and business of this corporation shall be managed by a Board of at least fifteen (15) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

On motion made by Mr. L. G. Blodgett, and seconded by Mr. J. K.

Lipscomb, said resolution was unanimously adopted by the Board

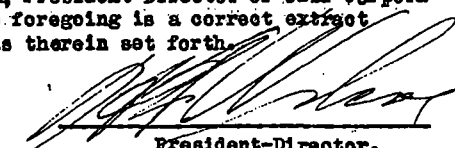
of Directors and ordered incorporated in the minutes of this meeting.

* * * * *

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

H. F. WILCOX OIL & GAS CO.

TULSA, OKLA.

MEETING OF THE DIRECTORS

OF

H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma.

April 7, 1924.

EXTRACT

Mr. A. W. Ellenberger offered the following Resolution:

WHEREAS, Section (a) of Article 5 of the By-Laws of this Company provides:

"The property and business of this corporation shall be managed by a Board of Directors of at least fifteen (15) Directors and they shall hold office until the next annual meeting of the Stockholders, or until their successors are elected and qualified."

NOW, THEREFORE, BE IT RESOLVED, that said Section (a) of Article 5 of said By-Laws be, and the same is hereby amended so as to read as follows:

"The property and business of this corporation shall be managed by a Board of Directors of at least twelve (12) Directors and they shall hold office until the next annual meeting of the stockholders, or until their successors are elected and qualified."

On motion by E. G. Tucker, seconded by Frank Hagenberg, and question carried in the vote, said Resolution was unanimously adopted by the Board of Directors and ordered incorporated in the minutes of this meeting.

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown,


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

MEETING OF THE DIRECTORS

H. F. WILCOX OIL & GAS CO.

July 8, 1925

Tulsa, Oklahoma.

" EXTRACT "

Mr. H. H. Gillpatrick offered the following resolution:

RESOLUTION

Whereas, Section (a) of Article 5 of the By-Laws of this Company provides

"the property and business of this corporation shall be managed by a board of directors of at least twelve (12) directors and they shall hold office until the next annual meeting of the stockholders, or until their successors are elected and qualified,"

NOW, THEREFORE, BE IT RESOLVED, that said Section (a) of Article 5 of said By-Laws be, and the same is hereby amended so as to read as follows:

"The property and business of this corporation shall be managed by a board of directors of at least thirteen (13) directors and they shall hold office until their successors are elected and qualified,"

On motion by Frank Hagenberg, seconded by H. J. Cassidy and the question carried in the vote, said Resolution was unanimously adopted by the Board of Directors and ordered incorporated in the minutes of the meeting.


H. F. WILCOX OIL & GAS CO.,

TULSA, OKLA.

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of the said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of the meeting of the Board of Directors of the H. F. Wilcox Oil & Gas Company, on the date above shown.

Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.



President-Director.

May 21, 1928.

Mr. Ralph E. Hilcken,
72 Trinity Place,
New York City.

Dear Mr. Hilcken:-

Enclosed herewith find twelve copies of an Amendment to the By-Laws, adopted at a Meeting of the Directors, April 7th, 1928, ten copies of which are for yourself and one copy each for the Registrar and Transfer Agent. This Amendment covers the rules and regulations of Stock Certificates, Dividends, etc.

Will you please inform me whether or not the Registrar and Transfer Agent will require a Corporate Seal. If so, I will be glad to ship them one.

Yours very truly,

HEA/A
Enc.

Secretary-Treasurer.

RE-CONVENED MEETING OF DIRECTORS

OF

H. F. WILCOX OIL & GAS COMPANY

Chicago, Illinois.

July 12, 1920.

EXTRACT

Motion made by A. W. Ellenberger, seconded by Frank Hagenberg, that Capital Stock of the H. F. Wilcox Oil & Gas Company, up to and including an outstanding stock issue of Ten Million Dollars (\$10,000,000.00) be made available for issue at such times, and in such amounts as may be deemed advisable by the Executive Committee. Question, Vote, Carried.

I hereby certify that I am the Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation, do hereby certify that the foregoing is a correct extract from the minutes of the meeting as therein set forth.


President-Director.

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

MEETING OF THE DIRECTORS
OF THE
H. F. WILCOX OIL & GAS COMPANY

Tulsa, Oklahoma.

May 4, 1925.

EXTRACT

.....

Mr. Horace B. Clay offered the following Resolution:

RESOLVED, That application be made to the New York Stock Exchange for the listing of 388,222 shares of the Common Capital Stock without nominal or par value of this Corporation, and that H. F. Wilcox, President, and/or C. A. Dye, Vice President, and M. P. Appleby, Secretary-Treasurer and Ralph E. Hilcken, Attorney, be and they hereby are designated by the corporation to appear before the Committee on Stock List of said Exchange, with authority to make such changes in said applications or agreements in regard thereto as may be necessary to conform with the Requirements for Listing.

On motion by L. G. Blodgett, seconded by J. K. Lipscomb, said Resolution was unanimously adopted by the Board of Directors and ordered incorporated in the minutes of the meeting.

.....

I hereby certify that I am Secretary-Treasurer of the H. F. Wilcox Oil & Gas Company and as such Secretary-Treasurer have custody of the books and records of said Corporation; and that the foregoing is a true and correct copy of an extract from the minutes of a meeting of the Board of Directors of the said H. F. Wilcox Oil & Gas Company, on the date above shown.


Secretary-Treasurer.

I, H. F. Wilcox, President-Director of said Corporation do hereby certify that the foregoing is a correct extract from the minutes of a meeting as therein set forth.


President-Director.

May 19, 1925.

Mr. Ralph M. Hildren,
78 Trinity Place,
New York City.

Dear Mr. Hildren:-

Enclosed herewith find two copies of
Opinion of Counsel by W. I. Williams of the firm of
Davidson & Williams. There is also an opinion by Mr.
Horace B. Clay, our Attorney.

I am also enclosing schedule in dup-
licate, showing the depreciation and depletion provi-
sions of our Company.

Yours very truly,

WPA/A
Ent.

Secretary-Treasurer.

OPINION OF COUNSEL

May 14, 1925.

Committee on Stock List,
New York Stock Exchange,
New York, New York.

Gentlemen:

In the matter of the listing of the
capital stock of the H. F. Wilcox Oil
& Gas Company, a Delaware Corporation
on the New York Stock Exchange.

We are familiar with the laws of the State of Delaware governing the matter of incorporation and we are familiar with the proceedings connected with the organization under the laws of the State of Delaware of the H. F. Wilcox Oil & Gas Company. We have examined the minutes of Directors and Stockholders meetings pertaining to the authorization, from time to time, of capital stock of this Company and the changes made in the amount of the par value of the stock and in the issuance of shares and the character of stock. We think that these changes have been made by due and proper authority of the Stockholders and of the Directors of this Company, and that the changes conform with the requirements of the statutes of the State of Delaware. It is our opinion that all of the stock of the Corporation of five dollar par value, has been legally and validly issued, and that all proper proceedings have been taken relative to the amendment of the charter, looking to the issuance of new no par value stock, and we believe that such no par value stock, when issued, will be validly issued stock; that both the five dollar par value stock issued and the new no par value stock issuable, are fully paid and non-assessable and no personal liability attaches thereto of Stockholders of the Corporation.

No member of this firm is a Director or Officer of the H. F. Wilcox Oil & Gas Company.

Very truly,

DAVIDSON & WILLIAMS

By

W. J. Williams.

Committee on Stock List,
New York Stock Exchange,
New York City.

May 19, 1925.

Gentlemen:-

With reference to the opinion of Davidson & Williams, Attorneys at Law, Tulsa, Oklahoma, dated May 14th, 1925, relative to the legality of organization, authorization, issue and validity of the securities of the H. F. Wilcox Oil & Gas Company, this is to advise that I fully concur in said opinion.

Yours very truly,

Horace B. Clay,

LEGAL DEPARTMENT.

RALPH E. HILCKEN

FINANCIAL STATISTICS
REPORTS ON CORPORATIONS
72 TRINITY PLACE, NEW YORK
TELEPHONE, RECTOR 4850

May 22nd, 1925.

Mr. H. F. Wilcox,
H. F. Wilcox Oil & Gas Company,
Wilcox Building,
Tulsa, Okla.

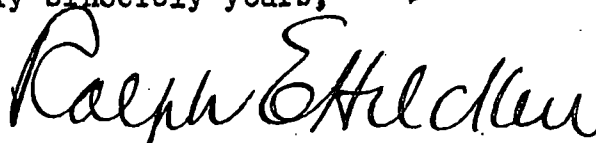
My dear Mr. Wilcox:

Receipt is acknowledged of your letter of May 19th. I presume that the escrow agreement and option of sale has only been given on the biggest blocks of stock so that in a general way I do not believe that the matter is so very serious.

I believe that we may work on the general supposition as you outline in your third paragraph to the effect that insofar as these transactions are concerned they do not effect the Company itself.

I note that you may be in New York during the first of the coming week. I have meanwhile received from Mr. Appleby a schedule of the distribution giving effect to the proposed exchange of no par value shares for par value shares and such copy duly certified. These copies, you will recall, make the same statement quoted in your third paragraph. I am inclined to believe that nothing will have to be done in this matter but if we do have to cancel or dissolve these agreements we have ample opportunity for so doing prior to the filing with the New York Stock Exchange on June 3rd.

Very sincerely yours,



REH:FCK

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

DISTRIBUTION OF CAPITAL STOCK

ON APRIL 15, 1925.

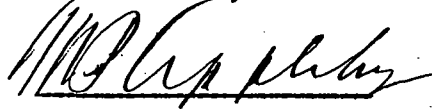
			SHARES
3047 Holders of	1 - 100 share lots		68,269
210 " "	101 - 200 " "		31,019
66 " "	201 - 300 " "		16,692
28 " "	301 - 400 " "		10,029
18 " "	401 - 500 " "		8,149
60 " "	501 - 1000 " "		41,782
33 " "	*1001 - Up " "		212,282
<hr/>			
3462 Stockholders			368,222

* The ten highest holders on the above date were as follows:

1 - 158,473 Shares	6 - 3,486 Shares
2 - 5,023 "	7 - 3,334 "
3 - 3,740 "	8 - 3,101 "
4 - 3,646 "	9 - 2,890 "
5 - 3,631 "	10 - 2,749 "

All Stock is free for sale and is held under no syndicate, agreement or control.

Certified Correct,



May 3, 1924.

Mr. Ralph E. Hilcken,
72 Trinity Place,
New York, N.Y.

Dear Mr. Hilcken:

With reference to a schedule entitled
"Distribution of Capital Stock", I note on the bottom of
the form provided for this purpose that there is a clause
as follows:

"All stock is free for sale and is
held under no syndicate, agreement
or control".

I would like to inquire as to what is meant by this wording.

Very truly yours,

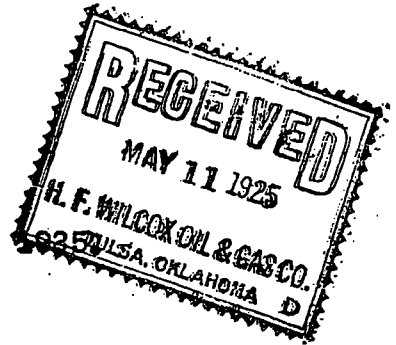
WPA/D.

SECRETARY-TREASURER.

RALPH E. HILCKEN

FINANCIAL STATISTICS
REPORTS ON CORPORATIONS
72 TRINITY PLACE, NEW YORK
TELEPHONE, RECTOR 4880

May 8th,



Mr. M. P. Appleby, Secretary-Treasurer,
H. F. Wilcox Oil & Gas Company,
Wilcox Building,
Tulsa, Okla.

Dear Mr. Appleby:

With reference to your letter of May 5th concerning quoted matter

"All stock is free for sale and is held under no syndicate, agreement or control."

This is interpreted that all of the stock, the listing of which is applied for, is free for sale; that is to say no restrictions on sale thereof pertains; such as that no blocks of stock are deposited in escrow whereby they may not be disposed of by such escrow agreement for a stated period; or that no agreement has been entered into by holders of large blocks of stock to withhold their stock from the market for a stated period.

I have discussed the status of the Corporation's stock with Mr. Wilcox and I feel confident that I can suggest to you that you may answer this question in the affirmative.

Very sincerely,

Ralph E. Hilcken

REH:FCK

May 30, 1925.

Bankers Trust Company,
18 Wall St.,
New York, N.Y.

Attention: Mr. H. L. Plumb, Asst. Secy.

Gentlemen:

Your letter of the 25th, regarding the second and third paragraphs of a resolution designating the Bankers Trust Company as Registrar, received. I concur in your opinion that nothing could be accomplished by having the certificates of the \$5.00 par value presented you for cancellation. The intent of our resolution was to satisfy the requirements made by your Bank.

This letter will be your authority to disregard paragraphs two and three of the Resolution furnished you, and substitute therefor the following:

"Second: That for the purpose of the original issue of Certificates representing such stock, the Registrar is hereby directed to register and countersign as Registrar certificates for not exceeding 388,222 shares of such capital stock of no par value when presented to it for that purpose and countersigned by the Transfer Agent, and signed by the President or Vice-President and the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary of this Company.

Third: That the Registrar be and it is hereby authorized and directed to register transfers from time to time of certificates for such capital stock, upon the cancellation of certificates for a like amount of stock of the same class, signed by the proper officers of this Company, and countersigned by the Transfer Agent and the Registrar, and to register and countersign new certificates accordingly when they shall have been signed by the proper officers of this Company, and countersigned by the Transfer Agent; PROVIDED, HOWEVER, that the Registrar shall be under no duty whatever in connection with the names in which certificates are issued or the correctness of any transfer from one name to another."

At our June Meeting of the Board of Directors we will have this amendment made to the resolution and forward certified copies thereof.

Yours very truly,

H.P.A.B.

SECRETARY-TREASURER.

Y.C.R.E.H.

Second: That for the purpose of the original issue of Certificates representing such stock, the Registrar is hereby directed to register and countersign as Registrar certificates for not exceeding 388,222 shares of such capital stock of no par value when presented to it for that purpose and countersigned by the Transfer Agent, and signed by the President or Vice President and the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary of this Company.

Third: That the Registrar be and it is hereby authorized and directed to register transfers from time to time of certificates for such capital stock, upon the cancellation of certificates for a like amount of stock of the same class, signed by the proper officers of this Company, and countersigned by the Transfer Agent and the Registrar, and to register and countersign new certificates accordingly when they shall have been signed by the proper officers of this Company, and countersigned by the Transfer Agent; PROVIDED, HOWEVER, that the Registrar shall be under no duty whatever in connection with the names in which certificates are issued or the correctness of any transfer from one name to another.

RALPH E. HILCKEN

FINANCIAL STATISTICS
REPORTS ON CORPORATIONS
72 TRINITY PLACE, NEW YORK
TELEPHONE, RECTOR 4350

May 27th, 1925.

Mr. M. P. Appleby,
H. F. Wilcox Oil & Gas Company,
Wilcox Building,
Tulsa, Okla.

My dear Mr. Appleby:

Yesterday I called at the Bankers Trust Company and lodged with them the various resolutions concerning their designation as Registrar. Today I called on Mr. Plumb and he has made a suggestion contained in copy of a letter which he has addressed to me in which I fully concur for the reason that to literally follow through your resolutions as embodied would necessitate the presentation by the Transfer Agent of the old \$5.00 certificate on each original issue, the inspection thereof and examination by the Registrar and the necessity by the Registrar of opening up a complete stock certificate ledger on the old stock.

During yesterday I also submitted to the Guaranty Trust Company the various resolutions concerning their designation as Transfer Agent, and all of which they advised me today was in good order. In connection with the presentation of \$5.00 par certificates to the Guaranty Trust Company for exchange into no par value stock, both the Guaranty Trust Company and myself recommend that after they have issued the no par value stock that they proceed forthwith to the cancellation of the \$5.00 par certificates and forward same to you from time to time (at stated intervals as you may mutually agree upon) and you could immediately proceed to cancell out these certificates on your original records. It will be noted that this procedure could and will obviate the necessity of presentation of \$5.00 par to the Registrar.

Reviewing our general course of procedure relative to the issuance of the new no par value stock, immediately upon my being advised by the Guaranty Trust Company of the delivery to them from the Republic Bank Note Company I will wire your Mr. Clay who will immediately issue orders to his Agent in Wilmington for the filing of the Amended Charter and the forwarding of numerous copies bearing the seal of the Secretary of State of Delaware so that I may in turn file same with the Transfer Agent and the Registrar. You will be reminded thereupon that you will stop transfer on \$5.00 par certificates and address some short form letter to stockholders presenting to you, advising them that the transfer agency is now located at Guaranty Trust Company, New York.

In connection with this subject concerning the Registrar I enclose you herewith the original letter addressed to me by Mr. Plumb of the Bankers Trust Company together with copy of proposed resolutions to be adopted by your Board of Directors as quickly as possible, to take the place of your present second paragraph. Please note first sentence, page 2 of letter, that

in the interim an official letter directing Bankers Trust Company to disregard your second and third paragraphs of the present resolutions on file with them will suffice until you have called your Directors to pass the necessary resolutions, copy of which are enclosed herewith.

I herewith confirm that I wired you today requesting you to furnish immediately a list of stops (Transfer Stops).

Very sincerely yours,

A handwritten signature in cursive script, reading "Ralph E. Hicken". The signature is written in dark ink and is positioned to the right of the typed name "Ralph E. Hicken".

REH:FCK

SEWARD PROSSER,
CHAIRMAN, BOARD OF DIRECTORS

ALBERT A. TILNEY,
PRESIDENT

BANKERS TRUST COMPANY

CORPORATE AGENCY DEPARTMENT

S. W. JONES
H. B. WATT,
L. H. PLUMS,
E. E. BEACH,

VICE, PRESIDENT
ASST. SECRETARY
ASST. SECRETARY
ASST. SECRETARY

CABLE ADDRESS—NEW YORK & PARIS—BANKTRUST
CABLE ADDRESS—LONDON—BANTRUSCON

NEW YORK
16 WALL STREET
FIFTH AVENUE AT 42ND STREET
MADISON AVENUE AT 57TH STREET
PARIS
365 PLACE VENDOME
LONDON
26, OLD BROAD STREET, E.C.2.

16 WALL STREET
NEW YORK

May 26, 1925.

Mr. Ralph E. Hilcken,
72 Trinity Place,
New York City

Dear Mr. Hilcken:

Referring to your call at this office yesterday afternoon at which time you lodged with us various documents in connection with the appointment of Bankers Trust Company as Registrar for the Capital Stock of H. F. Wilcox Oil & Gas Company; we are desirous of making a suggestion in reference to the resolutions appointing Bankers Trust Company Registrar.

The second paragraph of such resolution directs the Registrar to make transfers from the certificates of the capital stock with a par value of \$5.00. We do not believe that anything would be gained by having the Transfer Agent deliver to the Registrar certificates of capital stock of a par value of \$5.00 for cancellation and furthermore the operation of the registration agency would be greatly simplified if this feature was eliminated. We have, therefore, prepared amendments to paragraph second and third of the resolution above referred to, which we are handing you herewith for your consideration. You will note that these amendments contemplate that the transfer agent will deliver to the registrar certificates of the new no par value Common Stock up to an aggregate of 388,222 shares for registration; and furthermore that the registrar will register transfers of the no par value stock but is not authorized to receive for registration and transfer certificates represented by the old \$5.00 par value stock.

If these amendments meet with your approval we will be glad if you will arrange to have them adopted at the next meeting of the Board of Directors of H. F. Wilcox Oil & Gas Company.

Mr. Ralph E. Hilcken

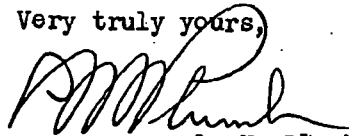
-2-

May 26, 1925.

In the meantime an official letter directing us to disregard the second and third paragraphs of the present resolution of appointment insofar as they apply to the old \$5.00 par value stock will be satisfactory to us.

Your kind attention to this matter will be appreciated.

Very truly yours,



L. H. Plumb
Assistant Secretary

LHP/LM
14

May 13, 1925.

Mr. Ralph E. Hilcken,
72 Trinity Place,
New York City.

Dear Mr. Hilcken:-

Yesterday I forwarded you quite a bit of data for use in our contemplated listing on the New York Stock Exchange.

You suggested that after I had completed a part of the information at hand, that I write you advising you as to the unfinished portion of the data which you will require. At the present time the uncompleted schedules are as follows:

Schedule No. 2: Papers to be filed with Application.

(8) Opinion of Counsel: The preparation of this is being held up, pending advice from you.

(9) Six copies of detailed distribution of Securities: (1 Certified). This schedule has not been completed and will be forwarded to you within a day or so.

(11) Certificate of Registrar of amount of securities registered at date of application: In another letter I have requested that you secure this certificate.

(14) Specimen of securities to be listed: Inasmuch as you will have access to these certificates, will you please attend to this item.

(15) Certified copy of Income Account, Surplus Account and Balance Sheet contained in application: These schedules are being prepared at the present time and will be forwarded from this office not later than May 20th.

Under Miscellaneous Data, there is yet to be forwarded to you, a schedule showing the History of the Company, to be prepared by Mr. Wilcox and a schedule showing the History of the Districts, to be prepared by Mr. Dye.

2.

R. E. H.

I do not have on my calendar any further data to be prepared. If I have overlooked anything, I will appreciate reference to it by wire, in order that I may proceed in its preparation.

Will you please advise me, if all data is in your hands on or before May 21st or 22nd, what your calendar will be from then on. I will want this information in order that I may make my arrangements accordingly.

It is possible that some schedules may occur to me that would be vital in connection with presenting our application, and in the event that they do, I will submit them to you for your consideration.

I refer now to the schedule showing oil production by leases for 1923, 1924 and four months of 1925. You will note that this schedule shows the production of the Floyd O. Howarth Oil & Gas Company. It would occur to me, that if you elect to set these schedules up separately in the application, you combine the Floyd O. Howarth Oil & Gas Company's production with the H. F. Wilcox Oil & Gas Company's production, inasmuch as we have acquired all the right, title and interest in these producing properties as of February 1, 1925.

My suggestion in connection with all schedules of Miscellaneous data would be that we use the consolidated report if possible, as it will make our application much less bulky and paints a truer picture of the company's holdings.

Yours very truly,

MPA/A

Secretary-Treasurer.

May 12, 1925.

Mr. Ralph E. Hilcken,
72 Trinity Place,
New York City.

Miscellaneous Data

Dear Mr. Hilcken:-

I do not recall any correspondence giving instructions as to the preparation of miscellaneous data, as is contained in the application of other companies, specimens of which you have heretofore furnished us. However suggestions have been made from time to time for us to follow the general outline of the Independent Oil & Gas Company.

Following this out in the order in which they are shown on the Independent Oil & Gas Company's application, I am enclosing herewith the following:

- (1) Location of leaseholds: There is enclosed two copies of a schedule showing the location of leaseholds separately of the H. F. Wilcox Oil & Gas Company, M. M. Valerius Oil & Gas Company and the H. F. Wilcox - Pampa Oil Company.
- (2) There is enclosed two copies showing a consolidated schedule of the location of the leaseholds of the H. F. Wilcox Oil & Gas Company and its subsidiary companies.
- (3) There is enclosed two copies of a schedule showing separately drilling wells of the H. F. Wilcox Oil & Gas Company, M. M. Valerius Oil & Gas Company and the H. F. Wilcox - Pampa Oil Company.
- (4) There is enclosed two copies showing a schedule of the drilling wells of the H. F. Wilcox Oil & Gas Company and its subsidiary companies in consolidated form.
- (5) There is enclosed two copies of a schedule showing separately the summary of producing wells and sand depths of the H. F. Wilcox Oil & Gas Company, M. M. Valerius Oil & Gas Company and the H. F. Wilcox - Pampa Oil Company.
- (6) There is enclosed two copies of a schedule showing a consolidated summary of producing wells and sand depths of the H. F. Wilcox Oil & Gas Company and its subsidiaries.

2.

R. E. H.

(7) There is enclosed two copies of a schedule showing the oil production by leases for the year 1923, 1924 and four months of 1925, of the H. F. Wilcox Oil & Gas Company, H. M. Valerius Oil & Gas Company and the Floyd O. Howarth Oil & Gas Company and the H. F. Wilcox - Pampa Oil Company.

(8) There is enclosed two copies of a schedule showing a consolidated report of the production by leases for the calendar year 1923, 1924 and 4 months ending April 30, 1925, of the H. F. Wilcox Oil & Gas Company and its subsidiary companies.

Yours very truly,

MPA/A
Enc.

Secretary-Treasurer.

H. M. WILSON OIL & GAS COMPANY

AND ITS SUBSIDIARIES

TULSA, OKLAHOMA

LOCATION OF LEASEHOLDERS

OKLAHOMA

TOTAL NO. OF LEASES		COUNTY	TOTAL ACRES	NON-PRODUCING		UNDER DEVELOPMENT		PRODUCING	
				NUMBER OF LEASES	TOTAL ACRES	NUMBER OF LEASES	TOTAL ACRES	NUMBER OF LEASES	TOTAL ACRES
5		Atoka	200.00	5	200.00				
2		Carter	160.00	2	160.00				
5	Royalty Deeds	Carter	295.00	5	295.00				
1	Royalty Deed	Coal	50.00	1	50.00				
1		Craig	80.00	1	80.00				
118		Creek	9,931.97	81	6,685.15			37	3,349.82
1	Fee Title Less Royalty	Creek	75.00	1	75.00				
4	Royalty Deeds	Creek	82.00	2	41.00			2	41.00
47		Garfield	5,423.00	47	6,423.00				
3		Garvin	276.18	3	276.18				
1	Royalty Deed	Garvin	40.00	1	40.00				
1		Grady	80.00	1	80.00				
1	Royalty Deed	Grady	32.00	1	32.00				
7		Grant	880.00	7	880.00				
28		Hughes	2,848.62	27	2,768.62			1	80.00
1	Royalty Deed	Hughes	40.00	1	40.00				
5		Jefferson	437.39	5	437.39				
1		Johnston	40.00	1	40.00				
2		May	246.27	2	246.27				
2		Kingfisher	295.00	2	295.00				
160		Lincoln	16,463.80	164	16,863.80	3	400.00	3	1,200.00
1		Love	160.00	1	160.00				
1	Royalty Deed	Love	99.00	1	99.00				
2		Marshall	70.00	2	70.00				
1		McGulain	135.00	1	135.00				
19		Noble	2,459.00	19	2,459.00				
63		Okfuskee	6,054.07	62	4,894.07	1	160.00		
3	Royalty Deeds	Okfuskee	65.00	3	65.00				
12		Okmulgee	1,300.00	5	320.00			7	980.00
39		Pawnee	3,549.10	39	3,549.10				
12		Payne	1,511.68	12	1,511.68				
73		Pontotoc	4,919.15	71	4,874.15	2	45.00		
1	Royalty Deed	Pontotoc	62.79	1	62.79				
68		Pottawatomie	11,502.99	68	11,502.99				
1	Royalty Deed	Pottawatomie	80.00	1	80.00			1	80.00
23		Seminole	1,760.11	22	1,600.11				
5		Stephens	350.00	5	350.00				
6	Royalty Deeds	Stephens	258.61	6	258.61				
1	Royalty Deed	Tillman	160.00	1	160.00				
5		Tulsa	680.00	2	200.00			3	480.00
1	Royalty Deed	Tulsa	1.00	1	1.00				
1		Woods	80.00	1	80.00				
734			75,236.73	674	66,420.91	6	605.00	54	6,210.82

M. M. VALERIUS OIL & GAS COMPANY

TULSA, OKLAHOMA

LOCATION OF LEASEHOLDS

OKLAHOMA

<u>TOTAL NO. OF LEASES</u>	<u>COUNTY</u>	<u>TOTAL ACRES</u>	<u>NON-PRODUCING NUMBER OF LEASES</u>	<u>TOTAL ACRES</u>	<u>UNDER DEVELOPMENT NUMBER OF LEASES</u>	<u>TOTAL ACRES</u>	<u>PRODUCING NUMBER OF LEASES</u>	<u>TOTAL ACRES</u>
38	Pontotoc	1,116.00	38	1,116.00				

KANSAS

53	Russell	10,677.60	48	9,600.00	1	260.00	4	917.60
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RECAPITULATION

<u>TOTAL NO. OF LEASES</u>	<u>STATE</u>	<u>TOTAL ACRES</u>	<u>NON-PRODUCING NUMBER OF LEASES</u>	<u>TOTAL ACRES</u>	<u>UNDER DEVELOPMENT NUMBER OF LEASES</u>	<u>TOTAL ACRES</u>	<u>PRODUCING NUMBER OF LEASES</u>	<u>TOTAL ACRES</u>
38	OKLAHOMA	1,116.00	38	1,116.00				
53	KANSAS	10,677.60	48	9,600.00	1	260.00	4	917.60
91		11,793.60	86	10,616.00	1	260.00	4	917.60

H. E. WILCOX OIL & GAS COMPANY
AND ITS SUBSIDIARY COMPANIES
DRILLING WELL
APRIL 30, 1928

COUNTY	STATE	LEASE	WELL NO.	COMPANY'S INTEREST	LOCATION	DESCRIPTION	PRESENT STATUS
Pontotoc	Oklahoma	Wm. Valtor	1	1/2	28-4N-7E	Center of SW NE	Shut down at 600 feet
Lincoln	Oklahoma	Jesse C. Fuqua	1	All	20-14-4	SW corner NE SE	Drilling at 4023 feet
Mitchell	Kansas	George W. Gish	1	All	23-6S-9W	NW corner SW NW	Drilling at 3211 feet
Lincoln	Oklahoma	A. M. Harris	1	All	22-15-2	SE corner NE	Drilling at 3910 feet
Pontotoc	Oklahoma	P. A. Morris	1	All	14-4-7	SW corner SE NW	Cleaning out at 1685 feet
Russell	Kansas	Carrie O. Oswald	2	All	8-12S-15W	SE corner SW SE	Drilling at 2984 feet
Russell	Kansas	Edward Oswald	6	All	8-12S-15W	NW corner NE SW	Drilling at 666 feet
Russell	Kansas	Edward Oswald	7	All	8-12S-15W	NE corner NE SW	Constructing rig
Russell	Kansas	Oswald-Valerius	4	All	17-12S-18W	SW corner NW NW	Drilling at 2530 feet
Russell	Kansas	Oswald-Valerius	5	All	7-12S-18W	SE corner SE SE	Drilling at 2405 feet
Russell	Kansas	Oswald-Valerius	6	All	8-12S-15W	SW corner SW NE	Location
Butler	Kansas	Jack D. Robinson	1	All	30-29N-3E	NE corner NE NE	Drilling at 2750 feet
Lincoln	Oklahoma	Sac & Fox Tribal Indian Agency	2	All	15-14-6	NE corner SW SW	Waiting for cement to set at 2975 feet
Creek	Oklahoma	Tullamarney Scott	6	All	20-14-10	NE corner SW NE	Drilling at 2288 feet (show of gas)
Creek	Oklahoma	Tullamarney Scott	8	All	20-14-10	NW corner SW NE	Drilling at 2970 feet
Creek	Oklahoma	Tullamarney Scott	9	All	20-14-10	SE corner SE NE	Drilling at 1250 feet
Creek	Oklahoma	Tullamarney Scott	10	All	20-14-10	Center S line SE NE	Constructing rig
Oklfuskee	Oklahoma	Charley Zimmer	1	All	19-11-9	SW corner SW SE	Drilling at 2755 feet
Lincoln	Oklahoma	Charles C. Smith	1	All	12-12-3	SE corner SW NE	Drilling at 3645 feet
Sumner	Kansas	William T. Stayton	1	All	5-32S-2W	NW corner NW SW	Drilling at 1700 feet
Russell	Kansas	Caroline A. Sutton	1	All	5-12S-15W	NW corner SE SW	Drilling at 2425 feet
Russell	Kansas	Caroline A. Sutton	2	All	5-12S-15W	NE corner SW SW	Drilling at 1530 feet
Russell	Kansas	Caroline A. Sutton	3	All	5-12S-15W	NN corner SE SW	Drilling at 773 feet
Gruy	Texas	Jud M. Wilson	1	All	Sec. 96, Blk. 3 I. & G. Ry. Sur.	NE corner NW	Drilling at 3785 feet
Gruy	Texas	Combs & Jorley	1	All	Sec. 59, Blk. 3 I. & G. Ry. Sur.	SW corner SW NW	Drilling at 2342 feet

H. F. WILCOX OIL & GAS COMPANY
AND ITS SUBSIDIARY COMPANIES
SUMMARY OF PRODUCING WELLS AND SAND DEPTHS

2.

APRIL 30, 1926.

COUNTY	STATE	NAME OF LEASE	AREA IN ACRES	WORKING INTEREST	DATE COMPLETED	NUMBER OF WELLS		SAND	DEPTH OF WELLS		
						OIL	GAS		SHALLOW	DEEP	AVERAGE
Creek	Oklahoma	A. Isaac	120	All	1 Well during 1920	1		Dutcher	2613	2613	2613
Oklmulgee	Oklahoma	Charles King	80	All	3 Wells during 1918	3		Glenn	1800	1800	1800
Creek	Oklahoma	Lynch-Johnson	80	1/2	3 Wells during 1923	3		Wilcox	3191	3242	3216
Creek	Oklahoma	Vivian Miles	60	All	3 Wells during 1922	5		Dutcher	3095	3184	3134
					1 Well during 1923			Dutcher	3149	3149	3149
					1 Well during 1924			Dutcher	3118	3118	3118
Creek	Oklahoma	Mounds Town Lots	2	All	1 Well during 1924	1		Dutcher	2138	2138	2138
Russell	Kansas	J. O. Mansell	80	All	1 Well during 1924	1		Russell	3042	3042	3042
Oklmulgee	Oklahoma	Joe Lewis	160	All	8 Wells during 1918	11		Glenn	1800	1800	1800
					3 Wells during 1919			Glenn	1800	1800	1800
					1 Well during 1919			Dutcher	2200	2200	2200
Russell	Kansas	Garrie G. Oswald	160	All	1 Well during 1923	2		Russell	3037	3037	3037
					1 Well during 1925			Russell	2975	2975	2975
Russell	Kansas	Edward Oswald	80	All	2 Wells during 1924	6		Russell	3018	3027	3022
					3 Wells during 1925			Russell	2947	3000	2973
Russell	Kansas	Oswald-Valerius	720	All	2 Wells during 1924	3		Russell	3000	3048	3024
					1 Well during 1925			Russell	2950	2950	2950
Creek	Oklahoma	El Louisa Post	120	All	3 Wells during 1923	4		Misener	3140	3243	3191
					1 Well during 1924			Misener	3192	3192	3192
Creek	Oklahoma	Samantha Post	160	All	1 Well during 1922	5		Misener	3207	3207	3207
					4 Wells during 1923			Misener	3224	3274	3233
Creek	Oklahoma	Harry Price	90	All	1 Well during 1920	1		Dutcher	2815	2815	2815
Fulsa	Oklahoma	Stockton Porter	80	3/8	1 Well during 1917	1		Glenn	1798	1798	1798
Fulsa	Oklahoma	Stockton Porter	80	1/2	1 Well during 1917	1		Glenn	1905	1905	1905
Lincoln	Oklahoma	Garrie Richardson	80	All	1 Well during 1925	1		Dutcher	4233	4233	4233
Creek	Oklahoma	John Releton	120	All	1 Well during 1919		1	Boche	1010	1010	1010
Creek	Oklahoma	Willie Stepney	148.22	All	2 Wells during 1920	2		Misener	2984	2995	2989
Oklmulgee	Oklahoma	A. M. Stidham	40	All	2 Wells during 1920	2		Glenn	2080	2129	2104
Creek	Oklahoma	Boonothlansy	80	All	1 Well during 1920		1	Boche	1003	1003	1003
Creek	Oklahoma	Slick & Jones	64.04	All	1 Well during 1920		1	Boche	1015	1015	1015
Lincoln	Oklahoma	Sac & Fox Tribal Indian Agency	720	All	1 Well during 1924	1		Pera	3105	3105	3105
Creek	Oklahoma	Amade Snapp	160	All	1 Well during 1922	1		Wheeler	1629	1629	1629
Creek	Oklahoma	Peggy Sewell	80	All	1 Well during 1921	2		Dutcher	2976	2976	2976
					1 Well during 1922			Dutcher	3010	3010	3010

H. F. WILCOX OIL & GAS COMPANY
AND ITS SUBSIDIARY COMPANIES
SUMMARY OF PRODUCING WELLS AND SAND DEPTHS
APRIL 30, 1928

COUNTY	STATE	NAME OF LEASE	AREA IN ACRES	WORKING INTEREST	DATE COMPLETED	NUMBER OF WELLS		SAND	DEPTH OF WELLS		
						OIL	GAS		SHALLOW	DEEP	AVERAGE
Creek	Oklahoma	Davis Sewell	40	All	1 Well during 1921 2 Wells during 1922	3		Dutcher Dutcher	2572 2969	2572 2986	2572 2977
Creek	Oklahoma	Emily Smith	40	All	1 Well during 1923	1		Wilcox	2775	2775	2775
Creek	Oklahoma	Tullemarney Scott	160	All	1 Well during 1924 5 Wells during 1925	6		Wilcox Wilcox	3360 3560	3360 3378	3340 3365
Creek	Oklahoma	Saloma Tiger	80	All	1 Well during 1922	1		Dutcher	2821	2821	2821
Creek	Oklahoma	Wilcox Tiger	60	All	1 Well during 1921	1		Dutcher	2780	2780	2780
Creek	Oklahoma	K. Tiger	80	All	1 Well during 1920 1 Well during 1921 2 Wells during 1922	4		Dutcher Dutcher Dutcher	2802 2794 2767	2802 2794	2802 2794 2767
Creek	Oklahoma	Hensley Tiger	60	All	2 Wells during 1921	2		Dutcher	2780	2812	2796
Creek	Oklahoma	Brace Tiger	60	All	1 Well during 1920	1		Dutcher	2790	2790	2790
Creek	Oklahoma	Patsie Wilson	80	All	1 Well during 1923	2		Dutcher	2969	2969	2969
Creek	Oklahoma	Eddie Warrior	120	All	1 Well during 1922		1	Layton	1606	1606	1606
Gray	Texas	Phoebe Worley	1440	All	1 Well during 1924	1		Granite Wash	2948	2948	2948
Lincoln	Oklahoma	J.E. Smullion	400	All	1 Well during 1924	1		Dutcher	4257	4257	4257
						144	2				

August 1, 1925.

Mr. Ralph E. Hileken,
72 Trinity Place,
New York City.

Dear Mr. Hileken:-

Enclosed herewith you will find
Statement of Oil Production, by Leases, for the
first one-half of 1925.

Yours very truly,

MPA/A

Secretary-Treasurer.

H. F. WILCOX OIL & GAS CO.,
TULSA, OKLA.

H. F. WILCOX OIL & GAS COMPANY

AND SUBSIDIARY COMPANIES

TULSA OKLAHOMA

OIL PRODUCTION BY LEASES FOR THE FIRST

SIX MONTHS 1925

	<u>GROSS BARRELS</u>	<u>NET BARRELS</u>	<u>AMOUNT</u>
Alice Alberta	78.84	68.98	106.92
R. L. Ansel	3,028.39	2,649.85	4,527.59
H. Banks & W. Banks	38,597.57	33,772.88	57,197.21
E. Barnett	9,645.88	8,440.14	12,893.79
L. Barnett	4,409.36	3,858.20	5,557.20
C. Brown	15,094.38	13,207.59	24,865.85
P. Bruner	21,317.76	18,467.86	33,186.10
L. Bruner	10,303.05	9,015.18	11,225.54
J. Catt	516.28	451.75	735.61
A. Charles	21,207.84	18,556.86	27,857.88
J. Drew	1,878.56	1,643.74	2,512.29
L. Eubanks	235.94	206.45	238.95
E. B. Greenwood	1,296.33	1,055.54	1,543.51
E. O. Hamilton	7,660.82	6,703.22	10,093.06
M. Harjo	57,306.41	50,143.11	69,851.19
S. Harjo	8,221.74	3,597.01	4,992.10
L. Harmon	353.24	309.09	477.63
L. Harry	1,789.97	1,566.21	2,114.41
A. Hawkins	2,524.36	2,208.83	3,880.24
J. Heneha	24,327.50	21,286.56	29,947.85
A. Isaacs	123.52	108.07	141.45
Chas. King	805.00	704.37	911.33
Joe Lewis	4,675.22	4,126.47	5,229.37
L. Johnson	25,843.47	11,306.50	19,976.39
V. Miles	44,925.37	39,309.71	54,466.19
Mounds Warehouse	1,662.47	1,609.87	2,819.23
J. J. Munsell	6,533.56	5,689.75	11,461.06
C. C. Oswald	11,958.41	10,463.62	21,871.57
Ed Oswald	132,050.89	115,544.53	249,676.09
Oswald-Valerius	79,652.57	69,696.00	149,287.93
S. Porter N. 80	101.56	44.43	63.19
S. Porter S. 80	1,855.66	609.54	1,009.86
E. L. Post	21,624.45	18,921.41	32,023.29
S. Post	9,288.20	8,127.20	13,739.49
H. Price	516.83	452.22	555.99
C. Richardson	1,119.82	979.84	1,959.68
Sac-Fox	5,339.64	4,672.18	10,177.10
T. Scott	204,281.83	178,740.87	362,367.13
P. Sewell	4,559.87	3,814.89	4,636.65
J. E. Smullion	5,394.80	4,720.46	5,737.63
A. Snapp	137.44	120.36	176.62
E. Smith	15,041.93	13,161.68	27,594.96
W. Stepney	15,045.13	13,164.55	19,229.17
A. M. Stidham	1,052.54	920.97	1,104.52
C. Sutton	1,338.28	1,171.00	2,634.74
B. Tiger	4,270.80	3,736.96	5,197.37
H. Tiger	8,973.15	7,851.51	10,640.64
K. Tiger	26,804.02	23,453.52	28,870.17
S. Tiger	4,634.30	4,372.90	5,633.69
W. Tiger	597.71	522.98	706.02
P. Wilson	3,133.56	2,852.36	3,845.98
P. Worley	4,600.10	4,025.08	6,196.10
	<u>877,536.32</u>	<u>752,204.65</u>	<u>1,363,745.52</u>
Royalty Income		<u>349.27</u>	<u>629.49</u>
	<u>877,536.32</u>	<u>752,554.12</u>	<u>1,364,375.01</u>

H. V. WILCOX OIL & GAS COMPANY & ITS SUBSIDIARIES

SULPA, OKLAHOMA

OIL PRODUCTION BY LEASES CALENDAR YEAR 1923, 1924, AND 4 MONTHS ENDING APRIL 30, 1925.

1923						1924						1925					
COUNTY	DISTRICT	NAME OF LEASE	GROSS BARRELS	NET BARRELS	NET AMOUNT RECEIVED	GROSS BARRELS	NET BARRELS	NET AMOUNT RECEIVED	GROSS BARRELS	NET BARRELS	NET AMOUNT RECEIVED	GROSS BARRELS	NET BARRELS	NET AMOUNT RECEIVED			
Okmulgee	Okmulgee, Okla.	A. Alborta	254.16	222.40	319.66	247.32	216.41	275.66									
Creek	Bristow	R. L. Ansel	60,834.98	53,231.62	85,254.92	13,610.03	11,914.12	17,232.50				2,033.81	1,779.59	2,855.63			
Okmulgee	Okmulgee	H. Banks & W. Banks	85,696.90	76,043.78	120,793.66	90,444.26	70,388.74	102,792.91				20,410.93	22,234.67	36,843.74			
Creek	Bristow	L. Barnett	61,180.92	53,633.31	75,152.79	32,553.48	28,576.20	37,396.44				8,898.96	5,811.69	8,278.37			
"	"	L. Barnett	62,142.78	54,392.46	73,640.30	22,877.68	19,493.00	23,436.87				2,990.28	2,621.75	3,640.70			
Hughes	Okemah	O. Brown				1,982.29	1,734.01	2,168.12				11,150.50	9,760.89	17,972.45			
Sealiole	Orcutt	F. Bruner				304,628.35	265,550.30	444,909.72				16,040.16	13,849.95	23,939.57			
Creek	Bristow	L. Bruner	24,942.38	21,554.61	26,036.29	24,442.28	21,386.82	22,744.21				7,161.43	6,267.61	7,479.03			
Creek	Bristow	J. Catt	1,117.16	977.51	1,476.28	916.14	801.64	1,117.37				364.84	319.24	530.22			
"	"	A. Charles	145,431.99	127,576.46	149,749.21	114,298.79	100,559.76	122,630.88				13,470.08	11,786.32	17,263.66			
Okmulgee	Okmulgee	D. Davis	627.56	549.21	672.34	230.00	206.86	207.37									
"	"	J. Drew	3,101.84	2,714.20	3,558.18	3,633.56	3,091.88	3,940.88				1,227.66	1,074.22	1,629.64			
"	"	L. Eubanks	393.92	344.69	399.60	226.02	201.90	275.59				70.72	66.25	49.69			
Okfuskee	Okemah	L. Fields				559.38	487.40	609.37									
Creek	Bristow	H. B. Greenwood	921.04	832.17	948.60	3,000.08	3,419.58	5,450.80				963.20	704.06	1,074.91			
"	"	H. O. Hamilton	59,578.16	51,255.85	79,953.58	24,700.30	21,618.03	31,089.18				5,301.07	4,638.43	6,892.64			
"	"	M. Harjo	164,807.29	137,590.14	182,741.80	278,120.73	243,355.67	328,554.26				42,942.38	37,574.63	50,744.46			
"	"	M. Harjo	46,653.44	41,121.86	47,553.71	34,480.03	30,084.93	37,532.07				5,314.51	4,328.10	5,117.17			
"	"	L. Harry	4,801.63	4,494.79	4,504.39	6,033.26	5,683.81	6,110.64				1,096.04	959.03	1,294.71			
"	"	A. Hawkins				6,046.04	4,489.07	10,013.96				1,614.74	1,412.91	2,320.29			
"	"	G. J. Hendrickson	1,292.02	1,150.51	1,419.23												
"	"	J. Hoshida	265,195.14	232,045.75	324,986.88	69,610.60	60,821.96	73,353.67				15,007.41	13,151.46	17,784.54			
"	Okmulgee	Amey Isaacs	261.60	228.82	222.47	274.07	239.81	250.04				80.16	75.39	97.33			
"	Bristow	W. Kelley	7,655.42	6,882.25	9,118.33												
Okmulgee	Okmulgee	Chas. King	1,697.56	1,334.13	1,640.01	1,625.68	1,334.79	1,384.86				454.45	397.44	500.82			
"	"	J. Lewis	9,655.97	8,610.81	10,409.96	10,804.72	9,561.35	10,034.78				2,706.91	2,404.81	2,904.28			
Creek	Bristow	Lynah-Johnson	138,473.12	60,704.32	100,136.11	93,006.64	41,076.37	68,034.30				18,979.99	9,303.75	13,987.39			
"	"	V. Miles	247,700.91	216,738.32	324,298.18	77,628.08	67,922.62	74,814.46				31,697.27	27,735.13	37,552.11			
"	Mounds	Mounds Ghee				794.42	698.12	993.05				1,260.49	1,197.89	1,995.27			
Russell	Russell, Kas.	J. J. Maxwell				18,422.50	13,494.69	18,674.61				4,366.18	3,784.49	7,213.83			
"	"	O. O. Oswald				50,899.31	44,013.62	62,418.11				6,905.16	6,040.27	11,919.05			
"	"	M. Oswald				100,690.92	97,971.10	121,379.13				48,822.64	40,219.81	128,161.35			
"	"	Oswald-Volarius				29,648.78	25,854.97	32,362.05				38,489.08	33,877.92	66,603.29			
Sulphur	Glenpool, Okla.	S. Porter E-60	113.26	113.26	147.26	180.99	83.84	114.07				64.64	22.37	36.30			
"	"	S. Porter E-60	1,447.46	1,447.46	2,098.45	3,369.50	1,267.12	1,020.81				1,107.42	363.37	664.78			
Creek	Bristow	S. L. Post	214,930.19	180,065.94	252,556.94	95,735.98	83,788.99	147,819.25				14,131.45	12,368.01	20,187.78			
"	"	S. Post	478,396.47	394,846.62	760,461.85	132,712.22	116,123.20	198,860.68				6,801.46	5,951.29	9,522.15			
"	"	Harry Price	8,940.89	7,823.28	10,612.49	2,800.49	2,020.36	2,112.98				557.20	312.64	347.43			
Lincoln	Stroud	Carrie Richardson										500.00	228.60	625.00			
Creek	Bristow	Emma Roberts	239.84	210.74	361.73												
Sulphur	Glenpool	Sample Lots	161.68														
Lincoln	Stroud	Sue Fox				950.30	838.51	1,040.15				3,247.23	2,841.37	5,874.70			
Creek	Bristow	T. Scott				1,056.00	923.12	1,183.91				108,510.11	94,946.35	192,019.12			
"	"	F. Sewell	29,478.17	25,788.07	31,323.09	12,857.39	11,250.23	12,068.79				3,576.34	3,189.30	3,711.11			
Lincoln	Stroud	J. O. Sullivan				13,911.32	12,172.41	12,345.09				5,824.86	3,346.82	3,882.66			
Creek	Bristow	A. Snapp	414.79	362.94	507.35	517.08	462.98	492.15				61.14	52.60	73.14			
Creek	Manford	H. Smith	29,146.08	25,621.02	42,481.62	43,340.42	37,922.07	73,015.18				9,215.76	8,065.79	116,175.97			
Creek	Bristow	W. Stepmay	33,562.20	29,307.00	38,601.35	43,580.17	30,264.64	36,142.98				9,339.25	8,096.88	12,850.95			
Okmulgee	Okmulgee	A. M. Stidham	2,945.05	2,578.86	2,939.47	2,724.01	2,397.89	2,476.40				717.96	628.21	709.29			
Creek	Bristow	B. Tiger	8,222.94	7,262.76	8,956.60	7,222.50	6,324.79	6,534.52				2,811.64	2,460.20	3,306.64			
"	"	H. Tiger	17,755.20	15,544.60	18,708.33	16,762.16	14,666.90	16,812.37				5,960.94	5,215.62	6,780.10			
"	"	K. Tiger	99,414.68	86,937.86	104,922.32	76,732.45	69,765.91	72,803.21				19,042.70	17,368.36	20,613.42			
"	"	S. Tiger	19,854.08	17,373.06	21,091.10	17,634.12	14,741.95	16,477.42				2,189.06	3,064.84	3,768.25			
"	"	U. Tiger	1,156.73	1,012.26	1,103.38	2,606.81	2,969.77	3,372.60				442.34	387.03	522.49			
"	"	P. Wilson	11,061.98	9,679.27	11,000.47	9,167.73	7,851.91	10,034.63				2,124.22	1,933.70	2,464.54			
Gray	Pampa, Texas	P. Worley				484.00	406.00	507.60				2,841.97	2,186.72	4,587.04			
Less Correction for Oil Stored & later sold for less than the price at which it was charged to storage					35,056.36			27,646.67									
Royalty income																	
			2,340,814.97	1,949,796.97	3,014,955.08	1,879,332.90	1,590,534.63	2,247,906.50	532,022.20	454,781.67	781,168.67	248.27	481.23				

**AMENDED AND RESTATED
AGREEMENT AND PLAN OF MERGER**

dated as of

June 19, 1996

among

EL PASO NATURAL GAS COMPANY,

EL PASO MERGER COMPANY

and

TENNECO INC.

**AMENDED AND
RESTATED
AGREEMENT**

AND

**PLAN OF
MERGER**

dated as of

June 19, 1996

among

**EL PASO
NATURAL GAS
COMPANY,
EL PASO
MERGER CO.**

and

TENNECO INC.

**TABLE OF
CONTENTS**

KMI000027

TABLE OF CONTENTS
FOR
AGREEMENT AND PLAN OF MERGER
(and Certain Other Agreements)

1. Agreement and Plan of Merger
2. A. Distribution Agreement
 - A. Benefits Agreement
 - B. Corporate Restructuring Transactions
 - C. Debt and Cash Allocation Agreement
 - D. Energy Business Pro Forma Balance Sheet
 - E. Energy Subsidiaries
 - F. Automotive/Packaging Businesses Pro Forma Balance Sheet
 - G. Industrial Subsidiaries
 - H. Insurance Agreement
 - I. Shipbuilding Business Pro Forma Balance Sheet
 - J. Shipbuilding Subsidiaries
 - K. Tax Sharing Agreement
 - L. TBS Services Agreement
 - M. Transition Services Agreement
 - N. Restated Certificate of Incorporation of [Name]
 - O. By-laws of [Name]
 - P. Trademark Transition License Agreement [natural gas]
 - Q. Trademark Transition License Agreement [ships]
3. B. Adjustable Rate Cumulative Preferred Stock, Summary of Principal Terms
4. C. Debt Realignment Plan
5. D. Adjustments to Equity Consideration
6. E. Form of Certificate of Designation
7. F. Pro Forma Financial Information Concerning the Energy Business
8. G. Certain Permitted Actions, Transactions and Other Matters
9. H. Indemnification provisions
10. I. Certain Deferred Intercompany Gains
11. J. Representations in Connection with IRS Ruling Letter
12. K. Benefits for Employees of the Energy Business
13. L. Guaranty
14. M. Form of Affiliate Letter
15. N. Form of Jenner & Block Tax Opinion

**AMENDED AND RESTATED
AGREEMENT AND PLAN OF MERGER**

dated as of

June 19, 1996

among

EL PASO NATURAL GAS COMPANY,

EL PASO MERGER COMPANY

and

TENNECO INC.

TABLE OF CONTENTS

	<u>Page</u>
ARTICLE I DEFINITIONS	B-2
ARTICLE II THE MERGER	B-7
2.1 Merger.	B-7
2.2 Effects of the Merger	B-7
2.3 Certificate of Incorporation and Bylaws	B-8
2.4 Directors	B-8
2.5 Conversion of Shares.	B-8
2.6 Exchange of Certificates	B-9
2.7 New Preferred Stock	B-11
ARTICLE III CLOSING AND FILING	B-11
3.1 Closing	B-11
3.2 Effective Time	B-11
ARTICLE IV REPRESENTATIONS AND WARRANTIES OF TENNECO	B-12
4.1 Organization and Existence	B-12
4.2 Capitalization	B-12
4.3 Authority and Approval	B-12
4.4 Financial Statements	B-13
4.5 Consents and Approvals; No Violations	B-13
4.6 Litigation	B-14
4.7 Tenneco SEC Documents; Accuracy of Information	B-14
4.8 No Material Adverse Effect	B-14
4.9 Advisors	B-14
4.10 Opinion of Financial Advisor	B-14
4.11 Amendments to Rights Agreement	B-15
ARTICLE V REPRESENTATIONS AND WARRANTIES OF ACQUIROR AND SUBSIDIARY ...	B-15
5.1 Organization and Existence	B-15
5.2 Capitalization	B-15
5.3 Authority and Approval	B-16
5.4 Financial Statements	B-16
5.5 Consent and Approvals; No Violation	B-16
5.6 Litigation	B-17
5.7 Acquiror SEC Documents; Accuracy of Information	B-17
5.8 No Material Adverse Effect	B-17
5.9 Advisors	B-17
5.10 Opinion of Financial Advisor	B-17
5.11 Due Authorization	B-17
5.12 No Active Business	B-17
5.13 Ownership of Tenneco Stock	B-17
ARTICLE VI COVENANTS OF THE PARTIES	B-18
6.1 Conduct of Tenneco and its Subsidiaries.	B-18
6.2 Conduct of the Business of Acquiror and its Subsidiaries	B-21
6.3 Access to Information; Confidentiality.	B-22
6.4 Directors' and Officers' Indemnification and Insurance.	B-22
6.5 Notification of Certain Matters.	B-24
6.6 Tax Treatment.	B-25
6.7 Registration Statement; Joint Proxy Statement; NPS Materials; Tender and Exchange Materials.	B-25

	<u>Page</u>
6.8 Stockholders' Meetings	B-28
6.9 Further Action; Reasonable Best Efforts	B-28
6.10 Public Announcements	B-29
6.11 Listing of Acquiror Common Stock and Depositary Shares	B-30
6.12 Rights Agreement	B-30
6.13 The Spinoffs	B-30
6.14 Antitrust Matters	B-30
6.15 Employee Matters	B-31
6.16 Debt Realignment	B-31
6.17 No Solicitations	B-31
6.18 Performance of Agreement and Distribution Agreement	B-31
6.19 Affiliates of Tenneco	B-32
6.20 Antitakeover Statutes	B-32
6.21 Equity Issuance by Acquiror	B-32
6.22 Ruhrgas AG	B-32
6.23 Additional Covenants of Acquiror	B-32
ARTICLE VII CONDITIONS PRECEDENT	B-34
7.1 Conditions to Obligations of Each Party to Effect the Merger	B-34
7.2 Additional Conditions to Obligations of Acquiror and Subsidiary	B-35
7.3 Additional Conditions to Obligations of Tenneco	B-36
ARTICLE VIII TERMINATION	B-36
8.1 Grounds for Termination	B-36
8.2 Effect of Termination	B-38
8.3 Waiver	B-38
ARTICLE IX EXTENT AND SURVIVAL OF REPRESENTATIONS, WARRANTIES, COVENANTS AND AGREEMENTS	B-38
9.1 Scope of Representations	B-38
9.2 Survival	B-38
ARTICLE X MISCELLANEOUS	B-39
10.1 Expenses	B-39
10.2 Notices	B-40
10.3 Remedies	B-40
10.4 Consent to Amendments	B-40
10.5 Successors and Assignors	B-40
10.6 Severability	B-40
10.7 Counterparts	B-40
10.8 Descriptive Headings	B-40
10.9 No Third-Party Beneficiaries	B-41
10.10 Entire Agreement	B-41
10.11 Construction	B-41
10.12 Incorporation of Exhibits	B-41
10.13 Governing Law	B-41

**AMENDED AND RESTATED
AGREEMENT AND PLAN OF MERGER**

THIS AMENDED AND RESTATED AGREEMENT AND PLAN OF MERGER is entered into as of June 19, 1996 (the "*Agreement Effective Date*"), by and among Tenneco Inc., a Delaware corporation ("*Tenneco*"), El Paso Natural Gas Company, a Delaware corporation ("*Acquiror*"), and El Paso Merger Company, a Delaware corporation and an indirect wholly-owned subsidiary of Acquiror ("*Subsidiary*").

WITNESSETH:

WHEREAS, the board of directors of Tenneco has approved a plan of distribution set forth in the form of agreement attached hereto as Exhibit A (which, together with any exhibits, schedules or attachments thereto, is hereinafter referred to as the "*Distribution Agreement*") which will be entered into prior to the Effective Time (as defined below) and pursuant to which, prior to the Effective Time,

(i) Tenneco and its subsidiaries will, through various intercompany transfers and distributions, restructure, divide and separate their existing automotive, packaging and shipbuilding businesses so that all of the assets, liabilities and operations of

(a) the automotive and packaging businesses will be owned, directly and indirectly, by a wholly-owned subsidiary of Tenneco (the "*Industrial Subsidiary*"), and

(b) the shipbuilding business will be owned, directly and indirectly, by a wholly-owned subsidiary of Tenneco (the "*Shipbuilding Subsidiary*"), and

(ii) all of the shares of capital stock of each of the Industrial Subsidiary and the Shipbuilding Subsidiary will be distributed on a pro rata basis as a dividend to the holders of Tenneco's issued and outstanding common stock (the "*Spinoffs*");

WHEREAS, Acquiror (which is the ultimate parent company of its consolidated group) desires to acquire Tenneco and its direct and indirect subsidiaries remaining immediately following the Spinoffs pursuant to the merger of Subsidiary with and into Tenneco (the "*Merger*"), with Tenneco surviving as an indirect subsidiary of Acquiror (the "*Surviving Corporation*");

WHEREAS, the respective boards of directors of Acquiror, Subsidiary and Tenneco, deeming the Merger to be advisable and in the best interests of their respective stockholders, have authorized and approved the execution and delivery of this Agreement and the performance of their respective obligations hereunder;

WHEREAS, for federal income tax purposes, the parties hereto intend that

(i) the Spinoffs will qualify as tax-free distributions within the meaning of Section 355 of the Internal Revenue Code of 1986, as amended (the "*Code*"), and

(ii) the Merger will be treated as a reorganization pursuant to the provisions of Section 368(a)(1)(B) of the Code;

WHEREAS, this Agreement is intended to be, and is adopted as, a plan of reorganization.

WHEREAS, the parties entered into an Agreement and Plan of Merger (the "*Prior Agreement*") as of June 19, 1996, and now desire to amend and restate the Prior Agreement in its entirety effective as of the Agreement Effective Date.

NOW, THEREFORE, in consideration of the premises and of the mutual and dependent promises, representations, warranties and covenants herein contained, the parties agree as follows:

ARTICLE I DEFINITIONS

Unless otherwise defined herein or unless the context otherwise requires, the following terms shall have the meanings set forth below:

"Acquiror Common Stock" means the Common Stock, par value \$3.00 per share, of Acquiror.

"Acquiror Preferred Stock" means the series of voting preferred stock of Acquiror to be designated as Adjustable Rate Cumulative Preferred Stock and described in the form of Certificate of Designation therefor attached hereto as Exhibit B; provided, however, that if either Tenneco or Acquiror determines, in good faith after consultation with the other party and its advisors, that there exists a reasonable likelihood that the issuance of Acquiror Preferred Stock (or Depositary Shares (as defined below) in respect thereof) in connection with the Merger would cause the Merger to be taxable to the stockholders of Tenneco, Acquiror shall have the absolute obligation (at Acquiror's sole cost) to amend, if legally possible, the terms of the Acquiror Preferred Stock in a manner reasonably acceptable to Tenneco so that the issuance would not cause the Merger to be so taxable. In the event that the terms of the Acquiror Preferred Stock are amended pursuant to the proviso in the immediately preceding sentence, the parties hereto hereby agree, if required by applicable Law, they shall (i) prepare and execute an appropriate amendment to this Agreement reflecting said amendment to the terms of the Acquiror Preferred Stock, (ii) subject to Sections 6.7(a) and 6.8 hereof, prepare, file and mail an appropriate supplement to the Joint Proxy Statement reflecting the terms of this Agreement and of the Merger as so amended, and (iii) if such amendment is made after the approval of the Merger by the stockholders of Tenneco, resubmit for the approval of the stockholders of Tenneco this Agreement and the Merger as so amended.

"Acquiror Common Stockholders' Meeting" has the meaning set forth in Section 6.8 hereof.

"Acquiror SEC Documents" means all filings made by Acquiror or its subsidiaries, including Subsidiary, with the SEC from January 1, 1995 through the Agreement Effective Date, including notes, schedules, amendments and exhibits thereto.

"Acquiror Stock" means the Acquiror Common Stock and the Acquiror Preferred Stock.

"Acquiror Stock Fund" has the meaning set forth in Section 2.6(a) hereof.

"Acquisition Transaction" has the meaning set forth in Section 6.17 hereof.

"Adjusted Common Equity Consideration" means the product of (i) the Average Acquiror Price, and (ii) the quotient determined by dividing the Common Equity Consideration by the Average Acquiror Common Equity Price.

"Affiliate" means, when used with respect to a specified Person, another Person that directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with the Person specified.

"Agreement" means this Amended and Restated Agreement and Plan of Merger, as the same may be amended from time to time in accordance with the terms hereof.

"Agreement Effective Date" means June 19, 1996, the date on which the Prior Agreement was entered into.

"Allocation Agreement" means the Debt and Cash Allocation Agreement included in the Distribution Agreement as an exhibit.

"Appraisal Consideration" has the meaning set forth in Section 2.6(h) hereof.

"Acquiror Price" means the closing price of the Acquiror Common Stock on the NYSE Composite Transactions Reporting System, as reported in *The Wall Street Journal*, for the trading day immediately

preceding the day on which the holders of Tenneco Stock entitled to vote at the Tenneco Stockholders' Meeting vote with respect to Merger; provided, however, if there is no closing price for Acquiror Common Stock on such trading day, the Acquiror Price shall be the closing price for Acquiror Common Stock on the next preceding trading day on which a trade of Acquiror Common Stock occurred.

"Average Acquiror Price" means the average of the closing prices of the Acquiror Common Stock on the NYSE Composite Transactions Reporting System, as reported in *The Wall Street Journal*, for the Average Period (but subject to correction for typographical or other manifest errors in such reporting), rounded to four decimal places.

"Average Acquiror Common Equity Price" means the Average Acquiror Price; provided that if the Average Acquiror Price is greater than \$38.3625, the Average Acquiror Common Equity Price shall be \$38.3625 and if the Average Acquiror Price is less than \$31.3875, the Average Acquiror Common Equity Price shall be \$31.3875; provided further, however, that the aforesaid dollar amounts shall be subject to appropriate adjustments, reasonably satisfactory to Tenneco and Acquiror in all respects, to reflect any recapitalization, reclassification, stock split, combination of shares, issuance of equity (other than issuances of shares pursuant to the exercise of employee stock options) or options for less than full market value or the like of or involving Acquiror.

"Average Period" means the 20 trading days on the NYSE immediately preceding the second trading day prior to the Effective Time.

"Benefits Agreement" means the Benefits Agreement attached to the Distribution Agreement as Exhibit A.

"Black-out Period" means the Average Period and the 20 trading days preceding the Average Period.

"Certificates" has the meaning set forth in Section 2.6(b) hereof.

"Claim" has the meaning set forth in Section 6.4(b) hereof.

"Claims Administration" means the handling of claims made under the D&O Policies, including the management, defense and settlement of claims.

"Closing" has the meaning set forth in Section 3.1 hereof.

"Closing Date" has the meaning set forth in Section 3.1 hereof.

"Commission" means the United States Securities and Exchange Commission.

"Common Conversion Number Case A" means the number of shares (rounded to the nearest one-thousandth of a share) of Acquiror Common Stock to be issued upon conversion of a single share of Tenneco Common Stock at the Effective Time pursuant to Section 2.5 hereof and the other terms and conditions of this Agreement, determined by dividing the Common Equity Consideration by the Average Acquiror Common Equity Price and dividing the result by the number of shares of Tenneco Common Stock outstanding immediately prior to the Effective Time as certified to Acquiror by Tenneco's principal registrar and transfer agent, which are to be converted into the right to receive Acquiror Stock pursuant to the provisions of Section 2.5 hereof.

"Common Conversion Number Case B" means the number of shares (rounded to the nearest one-thousandth of a share) of Acquiror Common Stock to be issued upon conversion of a single share of Tenneco Common Stock at the Effective Time pursuant to Section 2.5 hereof and the other terms and conditions of this Agreement, determined by dividing (x) the excess of (i) 7,000,000 over (ii) the number of shares of Acquiror Common Stock issued in exchange for shares of \$4.50 Preferred Stock and \$7.40 Preferred Stock in the Merger by (y) the number of shares of Tenneco Common Stock outstanding immediately prior to the Effective Time as certified to Acquiror by Tenneco's principal registrar and transfer agent, which are to be converted into the right to receive Acquiror Stock pursuant to the provisions of Section 2.5 hereof.

"Common Equity Consideration" means the Equity Consideration less the Preferred Stock Amount.

"Corporate Restructuring Transactions" has the meaning ascribed to that term in the Distribution Agreement.

"Debt" means any indebtedness representing an obligation for the repayment of money borrowed by a subject Person (including short-term debt and current maturities of long-term obligations), and any accrued but unpaid or accreted interest related to such indebtedness.

"Debt Realignment" means the plan for repayment, exchange and/or modification of the indebtedness of Tenneco, as described in Exhibit C attached hereto.

"Depositary" means The First National Bank of Boston, N.A.

"Depositary Agreement" means the Depositary Agreement attached hereto as Exhibit O.

"Depositary Receipt" means a depositary receipt issued by the Depositary to evidence a Depositary Share.

"Depositary Share" means a unit representing a one twenty-fifth fractional interest in a whole share of Acquiror Preferred Stock which shall be evidenced by a Depositary Receipt issued to the Person entitled to such fractional interest and which shall entitle the holder thereof, pursuant to the Depositary Agreement, to rights equivalent to those of a holder of a whole share of Acquiror Preferred Stock (to the extent of such one twenty-fifth fractional interest therein).

"Dissenting Shares" has the meaning set forth in Section 2.6(h) hereof.

"DGCL" means the Delaware General Corporation Law, as amended.

"D&O Policies" has the meaning set forth in Section 6.4(d) hereof.

"Effective Time" has the meaning set forth in Section 3.2 hereof.

"Energy Assets" has the meaning ascribed to that term in the Distribution Agreement.

"Energy Business" has the meaning ascribed to that term in the Distribution Agreement.

"Energy Group" has the meaning ascribed to that term in the Distribution Agreement.

"Energy Subsidiaries" means the direct and indirect consolidated subsidiaries of Tenneco immediately following the Spinoffs, including the Major Subsidiaries.

"Equity Consideration" means \$750,000,000.

"Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

"Exchange Agent" means First Chicago Trust Company of New York, or such other trust company or bank designated by Acquiror and acceptable to Tenneco, who shall act as agent for the holders of Tenneco Stock in connection with the Merger to receive the Exchange Fund (as defined in Section 2.6(a) hereof).

"\$4.50 Preferred Stock" means the \$4.50 Cumulative Preferred Stock of Tenneco.

"\$4.50 Preferred Conversion Number" means the number of shares (rounded to the nearest one-thousandth of a share) of Acquiror Common Stock to be issued upon conversion of a single share of \$4.50 Preferred Stock at the Effective Time pursuant to Section 2.5 and the other terms and conditions of this Agreement, determined by dividing (i) \$115, by (ii) the Acquiror Price.

"GAAP" means United States generally accepted accounting principles and practices, as in effect on the date of this Agreement, as promulgated by the Financial Accounting Standards Board and its predecessors.

"Gains Tax" has the meaning set forth in Section 10.1(c) hereof.

"Governmental Authority" means any government or any agency, bureau, board, commission, court, department, official, political subdivision, tribunal or other instrumentality of any government, whether federal, state or local, domestic or foreign.

"Higher Proposal" has the meaning set forth in Section 6.17 hereof.

"HSR Act" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

"Indemnified Parties" has the meaning set forth in Section 6.4(b) hereof.

"Industrial Business" has the meaning ascribed to that term in the Distribution Agreement.

"Industrial Group" has the meaning ascribed to that term in the Distribution Agreement.

"Insurance Administration" means, with respect to a D&O Policy, the accounting for premiums, defense costs, indemnity payments, deductibles and retentions, as appropriate, under the terms and conditions of such D&O Policy, and the distribution of Insurance Proceeds.

"Insurance Proceeds" means, with respect to an insured party, those monies, net of any applicable premium adjustment, deductible, retention or similar cost paid or held by or for the benefit of such insured party, which are either

- (i) received by an insured from an insurance carrier, or
- (ii) paid by an insurance carrier on behalf of an insured.

"IRS Ruling Letter" has the meaning set forth in Section 7.1(g) hereof.

"Joint Proxy Statement" has the meaning set forth in Section 6.7 hereof.

"Law" means any constitutional provision, statute, law, ordinance, rule, regulation, permit, decree, injunction, judgment, order, decree, ruling, determination, finding or writ of any Governmental Authority.

"Lazard" means Lazard Frères & Co. LLC.

"Major Subsidiaries" means the following subsidiaries of Tenneco after giving effect to the Spinoffs:

<u>Name</u>	<u>Jurisdiction of Organization</u>
Tennessee Gas Pipeline Company	Delaware
Tenneco Energy Resources Corporation	Delaware
Tenneco Gas Australia, Inc.	Delaware
Tenneco Corporation	Delaware
Tenneco Ventures Corporation	Delaware
Midwestern Gas Transmission Company	Delaware
East Tennessee Natural Gas Company	Tennessee

"Material Adverse Effect on Acquiror" means an event, change or effect that:

- (i) is or is reasonably likely to be materially adverse to the business, operations, properties or financial condition of Acquiror and its consolidated subsidiaries, taken as a whole; or
- (ii) prevents Acquiror or Subsidiary from consummating the transactions contemplated hereby, including the Merger, prior to the date specified in Section 8.1(ii) hereof.

"Material Adverse Effect on Tenneco" means an event, change or effect that:

- (i) is or is reasonably likely to be materially adverse to the business, operations, properties or financial condition of the Energy Business, taken as a whole; or
- (ii) prevents Tenneco from consummating the transactions contemplated hereby, including the Spinoffs and the Merger, prior to the date specified in Section 8.1(ii) hereof.

"New Certificates" has the meaning set forth in Section 2.6(a) hereof.

"New Preferred Stock" means the series of junior preferred stock of Tenneco to be issued prior to the Closing Date as set forth in Section 6.1(d) hereof and described in the form of Certificate of Designation therefor attached hereto as Exhibit E.

"NPS Materials" means any registration statement, private placement memorandum and/or other documents or filings prepared by or on behalf of Tenneco or Acquiror (or their Affiliates or representatives) and

(i) distributed to prospective purchasers or other receivers of New Preferred Stock, or

(ii) filed with the Commission or other Governmental Authority, or the NYSE or other stock exchange, relating to the issuance of New Preferred Stock.

"NPS Value" means the market value of the New Preferred Stock issued and outstanding at and as of the Effective Time, as jointly determined by the financial advisors identified in Sections 4.10 and 5.10 below on the Closing Date (or, if they are unable to so agree, by Morgan Stanley & Co. Incorporated later on the Closing Date). If the New Preferred Stock is issued pursuant to a public issuance or private placement (as opposed to a stock dividend), the gross proceeds of the issuance or placement shall be presumptive evidence of the NPS Value (subject only to adjustment for changes in value, if any, occurring between the date of the issuance or placement and the Closing Date).

"NYSE" means the New York Stock Exchange.

"1981 Stock Plan" means the 1981 Tenneco Inc. Key Employee Stock Option Plan.

"1994 Stock Plan" means the 1994 Tenneco Inc. Stock Ownership Plan.

"Option Plans" means the 1981 Stock Plan and the 1994 Stock Plan.

"Person" means any natural person, corporation, business trust, joint venture, association, company, partnership, limited liability company or other entity, or any government, or any agency or political subdivision thereof.

"Preferred Stock Amount" means an amount equal to the Acquiror Price times the number of shares of Acquiror Common Stock issued to the holders of the \$4.50 Preferred Stock and the \$7.40 Preferred Stock pursuant to the terms of Section 2.5 hereof.

"Preferred Stock Conversion Number" means the result obtained by (x) subtracting from the Adjusted Common Equity Consideration the product of (i) the excess of (A) 7,000,000 over (B) the number of shares of Acquiror Common Stock issued in exchange for shares of \$4.50 Preferred Stock and \$7.40 Preferred Stock in the Merger and (ii) the Average Acquiror Price, (y) dividing the result obtained pursuant to clause (x) by the "Assigned Value" (as set forth in Exhibit B attached hereto) (being the liquidation value) of the Acquiror Preferred Stock and (z) dividing the result obtained pursuant to clause (y) by the number of shares of Tenneco Common Stock outstanding immediately prior to the Effective Time as certified to Acquiror by Tenneco's principal registrar and transfer agent.

"Rights" shall mean the preferred stock purchase rights issued pursuant to the Rights Agreement.

"Rights Agreement" shall mean the Rights Agreement dated as of May 24, 1988, as amended and restated as of October 1, 1989, between Tenneco and First Chicago Trust Company of New York.

"Registration Statement" has the meaning set forth in Section 6.7 hereof.

"Replacement D&O Policy" has the meaning set forth in Section 6.4(d) hereof.

"SECT" means the Stock Employee Compensation Trust currently maintained by Tenneco.

"Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

"\$7.40 Preferred Stock" means the \$7.40 Cumulative Preferred Stock of Tenneco.

"\$7.40 Preferred Conversion Number" means the number of shares (rounded to the nearest one-thousandth of a share) of Acquiror Common Stock to be issued upon conversion of a single share of \$7.40

Preferred Stock at the Effective Time pursuant to Section 2.5 and the other terms and conditions of this Agreement, determined by dividing (i) \$115, by (ii) the Acquiror Price.

"S/I Transaction" has the meaning set forth in Section 6.13 hereof.

"Shipbuilding Business" has the meaning ascribed to that term in the Distribution Agreement.

"Shipbuilding Group" has the meaning ascribed to that term in the Distribution Agreement.

"Stockholders' Meetings" has the meaning set forth in Section 6.8 hereof.

"Takeover Statute" means any "fair price," "moratorium," "control share acquisition" or other similar antitakeover statute or regulation enacted under state or federal laws in the United States or any foreign jurisdiction.

"Tender and Exchange Materials" means any registration statement, private placement memorandum, offer to purchase and/or other documents or filings prepared by or on behalf of Tenneco or Acquiror (or their Affiliates or representatives), either separately or jointly, and

(i) distributed to the record and/or beneficial holders of Tenneco consolidated Debt in connection with the Debt Realignment, and/or

(ii) filed with the Commission or other Governmental Authority, or the NYSE or other stock exchange, relating to Debt Realignment.

"Tenneco Common Stock" means the Common Stock, par value \$5.00 per share, of Tenneco.

"Tenneco SEC Documents" means all filings made by Tenneco or its subsidiaries with the SEC since January 1, 1995 through the Agreement Effective Date, including notes, schedules, amendments and exhibits thereto.

"Tenneco Stock" means the Tenneco Common Stock, the \$7.40 Preferred Stock and the \$4.50 Preferred Stock (but not the New Preferred Stock).

"Tenneco Stockholders' Meeting" has the meaning set forth in Section 6.8 hereof.

"Transfer Taxes" has the meaning set forth in Section 10.1(c) hereof.

"\$" is a reference to United States dollars. All monetary amounts set forth in this Agreement are intended to be United States currency amounts.

ARTICLE II THE MERGER

2.1 Merger. Upon the terms and subject to the conditions herein set forth, Subsidiary shall be merged with and into Tenneco at the Effective Time.

2.2 Effects of the Merger. The Merger shall have the effects set forth in the DGCL. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time the separate existence and corporate organization of Subsidiary shall cease and Tenneco shall continue as the Surviving Corporation, and all the identity, purposes, properties, rights, privileges, powers, assets, franchises, debts and duties of Tenneco and Subsidiary shall, except as expressly provided herein or in the DGCL, vest in the Surviving Corporation and become the identity, purposes, properties, rights, privileges, powers, assets, franchises, debts and duties of the Surviving Corporation.

2.3 Certificate of Incorporation and Bylaws.

(a) At the Effective Time, the certificate of incorporation of Tenneco in effect immediately prior to the Effective Time shall be amended as set forth in Annex 1 hereto, and as so amended shall be the certificate of incorporation of the Surviving Corporation.

(b) From and after the Effective Time, the by-laws of Subsidiary, as in effect immediately prior to the Effective Time (but, in any event, to be in form and substance reasonably acceptable to Tenneco), shall, until further amended as provided by law, constitute the by-laws of the Surviving Corporation, except that the by-laws of the Surviving Corporation shall include the provisions specified in Section 6.4(a)(I) of this Agreement.

2.4 Directors. The directors of Subsidiary at the Effective Time shall be the initial directors of the Surviving Corporation, each to hold office from the Effective Time in accordance with the certificate of incorporation and bylaws of the Surviving Corporation and until his or her successor is duly elected and qualified.

2.5 Conversion of Shares. At the Effective Time, by virtue of the Merger and without any action on the part of any stockholder of either Tenneco or Subsidiary, as applicable, but subject to Section 2.6 hereof, each outstanding share of Subsidiary's capital stock and Tenneco Stock (but not New Preferred Stock) shall be cancelled or converted in accordance with the following provisions of this Section 2.5:

(a) **Capital Stock of Subsidiary.** Each share of Subsidiary's capital stock issued and outstanding immediately prior to the Effective Time shall be converted into and become one fully paid and nonassessable share of Common Stock, par value \$5.00 per share, of the Surviving Corporation.

(b) **Cancellation of Treasury and Acquiror-Owned Stock.** Each share of Tenneco Stock owned immediately prior to the Effective Time (after giving effect to the Spinoffs) by Tenneco, directly as treasury stock or indirectly through one or more of its wholly-owned subsidiaries, or by Acquiror or any direct or indirect wholly-owned subsidiary of Acquiror, shall be cancelled and retired and shall cease to exist and no Acquiror Stock or other consideration shall be delivered in exchange therefor or with respect thereto.

(c) **Conversion of \$7.40 Preferred Stock.** Each share of \$7.40 Preferred Stock issued and outstanding immediately prior to the Effective Time (other than shares to be cancelled in accordance with Section 2.5(b) above) shall be converted into the right to receive that number of fully paid and nonassessable shares of Acquiror Common Stock that is equal to the \$7.40 Preferred Conversion Number.

(d) **Conversion of \$4.50 Preferred Stock.** Each share of \$4.50 Preferred Stock issued and outstanding immediately prior to the Effective Time (other than shares to be cancelled in accordance with Section 2.5(b) above) shall be converted into the right to receive that number of fully paid and nonassessable shares of Acquiror Common Stock that is equal to the \$4.50 Preferred Conversion Number.

(e) **Conversion of Tenneco Common Stock.** Each share of Tenneco Common Stock issued and outstanding immediately prior to the Effective Time (other than shares to be cancelled in accordance with Section 2.5(b) above) shall be converted into the right to receive (i) that number of fully paid and nonassessable shares of (i) Acquiror Common Stock that is equal to the Common Conversion Number Case A if the issuance of Acquiror Common Stock as contemplated by this Section 2.5(e)(I) is approved by the requisite vote of the holders of the Acquiror Common Stock, or if such vote is not required by law or the rules of any national securities exchange on which the Acquiror Common Stock is listed, or (ii) if the issuance of shares of Acquiror Common Stock as contemplated by Section 2.5(e)(I) is not approved by the requisite vote of the holders of the Acquiror Common Stock and is not permissible as aforesaid without such vote, (A) that number of fully paid and nonassessable shares of Acquiror Common Stock that is equal to the Common Conversion Number Case B and (B) that number of Depositary Shares representing interests in that fraction of a fully paid and nonassessable share of Acquiror Preferred Stock that is equal to the Preferred Stock Conversion Number.

(f) **Redemption of Preferred Stock.** Subject to the consent of Acquiror (which shall not be unreasonably withheld or delayed), Tenneco may at any time hereafter, prior to the Effective Time, redeem the \$4.50 Preferred Stock and/or the \$7.40 Preferred Stock in accordance with their respective terms.

2.6 Exchange of Certificates.

(a) *Exchange Agent.* Promptly after the Effective Time, Acquiror shall deposit with the Exchange Agent, for the benefit of the holders of shares of Tenneco Stock, for exchange in accordance with this Section 2.6, certificates and Depositary Receipts, if any (together, the "*New Certificates*") representing shares of Acquiror Stock and any Depositary Shares, respectively, in amounts sufficient to allow the Exchange Agent to make all deliveries of New Certificates that may be required in exchange for Certificates (as defined below) pursuant to this Section 2.6 (the "*Acquiror Stock Fund*") (such Acquiror Stock Fund, together with any dividends or distributions with respect thereto contemplated by Section 2.6(d) hereof and cash in lieu of fractional shares or any fractional Depositary Shares contemplated by Section 2.6(e) hereof, being hereinafter referred to as the "*Exchange Fund*").

(b) *Exchange Procedures.* As soon as practicable after the Effective Time, the Surviving Corporation shall cause the Exchange Agent to mail to each holder of record of a certificate or certificates which immediately prior to the Effective Time represented outstanding shares of Tenneco Stock which were converted pursuant to Section 2.5 hereof into the right to receive shares of Acquiror Stock and Depositary Shares, if any (the "*Certificates*")

(i) a letter of transmittal (which shall be in such form and have such provisions as Acquiror and Tenneco may reasonably specify), and

(ii) instructions for use in effecting the surrender of the Certificates in exchange for New Certificates.

Upon surrender of a Certificate for cancellation to the Exchange Agent together with such letter of transmittal, duly completed in accordance with the instructions thereto and executed, the holder of such Certificate shall be entitled to receive in exchange therefor a New Certificate or New Certificates representing that number of whole shares of Acquiror Stock (and any whole Depositary Shares) which such holder has the right to receive pursuant to the provisions of Section 2.5 hereof (after giving effect to Sections 2.6(e) and 2.6(h) hereof) and any cash paid in lieu of fractional shares (or any fractional Depositary Shares) and any dividends or distributions with respect thereto as contemplated by Sections 2.6(e) and 2.6(d) hereof, after giving effect to any required tax withholdings, and the Certificate so surrendered shall forthwith be cancelled. In the event of a transfer of ownership of Tenneco Stock that is not registered in the transfer records of Tenneco, a New Certificate representing the proper number of shares of Acquiror Stock (and any Depositary Shares) may be issued to a transferee if the Certificate formerly representing such Tenneco Stock is presented to the Exchange Agent, accompanied by all documents required to evidence and effect such transfer and by evidence that any applicable stock transfer taxes have been paid. Until surrendered as contemplated by this Section 2.6(b), each Certificate shall be deemed at any time after the Effective Time to represent only the right to receive upon such surrender a New Certificate or New Certificates representing such whole shares of Acquiror Stock (and any whole Depositary Shares), any dividends or distributions in respect of such shares of Acquiror Stock (and any Depositary Shares) and cash in lieu of any fractional shares of Acquiror Stock (or any fractional Depositary Shares), as is contemplated by Sections 2.5 and 2.6 of this Agreement.

(c) *Fractional Shares.* Notwithstanding anything to the contrary contained herein (but except for the issuance of Depositary Receipts), no scrip or certificates for fractional shares of Acquiror Stock or for any fractional Depositary Shares shall be issued, and no Person otherwise entitled to any such fractional share or fractional Depositary Share shall be entitled to vote, to receive dividends, or to any other rights of a holder of a share or Depositary Share with respect to such fractional interest. Instead, the Exchange Agent shall act as agent for the holders of Tenneco Stock and shall sell on the NYSE, as promptly as possible, but in any event not later than 30 days after the Closing Date, for the account of the Persons otherwise entitled to such fractional shares or fractional Depositary Shares, shares of Acquiror Stock or Depositary Shares equivalent to the aggregate of such fractional interests. The Exchange Agent shall, until December 31, 1998, pay to such Persons upon surrender of their Certificate(s) their respective pro rata shares of the net proceeds of such sale, without interest. On December 31, 1998, any remaining proceeds of the sale shall be paid over to Acquiror, after which the Persons otherwise entitled to such fractional interests represented by such proceeds shall look only to Acquiror for payment, subject to the requirements of escheat laws of the various states that may be applicable.

(d) *Dividends and Other Distributions.* Any dividend or other distribution declared or made after the Effective Time with a record date after the Effective Time in respect of Acquiror Stock issuable hereunder to the holder of a Certificate not then surrendered pursuant to Section 2.6(b) hereof shall be paid to the Exchange Agent (or, if payable after December 31, 1998, shall be set aside and retained by Acquiror), and no such dividend or other distribution payable in respect of such Acquiror Stock shall be paid to the holder of such outstanding Certificate until such Certificate shall have been so surrendered to the Exchange Agent (or, if after December 31, 1998, to Acquiror). Upon surrender of such outstanding Certificate, there shall be paid by the Exchange Agent (or, if after December 31, 1998, by Acquiror) to or at the direction of the holder of the New Certificate(s) issued in exchange therefor the amount (without interest thereon) of all dividends or distributions which have theretofore been paid to the Exchange Agent (or, if after December 31, 1998, set aside and retained by Acquiror) with respect to the number of shares of Acquiror Stock and any Depositary Shares represented by the New Certificate(s) issued upon such surrender and exchange.

(e) *No Further Ownership Rights in Tenneco Stock.* All shares of Acquiror Stock and any Depositary Shares issued upon the surrender for exchange of shares of Tenneco Stock in accordance with the terms hereof (including any cash paid pursuant to Section 2.6(c) hereof) shall be deemed to have been issued in full satisfaction of all rights pertaining to such shares of Tenneco Stock, and there shall be no further registration of transfers on the stock transfer books of the Surviving Corporation of the shares of Tenneco Stock that were outstanding immediately prior to the Effective Time. If, after the Effective Time, Certificates are presented to the Surviving Corporation for any reason, they shall be cancelled and exchanged as provided in this Section 2.6.

(f) *Termination of Exchange Fund.* Any portion of the Exchange Fund held by the Exchange Agent that remains undistributed to the stockholders of Tenneco after December 31, 1998, shall be delivered to Acquiror, and any stockholders of Tenneco who have not theretofore complied with this Section 2.6 shall thereafter look only to Acquiror for payment of their claims for Acquiror Stock, any Depositary Shares, any cash in lieu of fractional shares of Acquiror Stock or in lieu of any fractional Depositary Shares and any dividends or distributions with respect to Acquiror Stock.

(g) *No Liability.* None of Acquiror, Subsidiary, Tenneco, the Industrial Subsidiary or the Shipbuilding Subsidiary (or any of their respective direct or indirect subsidiaries or Affiliates) shall be liable to any holder of shares of Tenneco Stock, Acquiror Stock or any Depositary Shares, as the case may be, for such shares (or dividends or distributions with respect thereto) or cash for payment in lieu of fractional shares or in lieu of any fractional Depositary Shares delivered to a public official pursuant to any applicable abandoned property, escheat or similar law. The Industrial Subsidiary, the Shipbuilding Subsidiary and their respective direct and indirect subsidiaries and Affiliates shall be deemed third party beneficiaries of this Section 2.6(g) and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 2.6(g).

(h) *Dissenting Holders of \$4.50 Preferred Stock and Dissenting Holders of New Preferred Stock.* Notwithstanding anything in this Agreement to the contrary, shares of \$4.50 Preferred Stock and New Preferred Stock that are issued and outstanding immediately prior to the Effective Time and are held by stockholders who are entitled to appraisal rights in respect thereof under Section 262 of the DGCL and who have

(i) not voted such shares in favor of the adoption of this Agreement or otherwise waived or lost their right to demand appraisal of such shares and

(ii) properly demanded appraisal of such shares in accordance with Section 262 of the DGCL (the "*Dissenting Shares*")

shall not be converted as described in Section 2.5(d) above or remain outstanding as described in Section 2.7 hereof, as the case may be, but shall become the right to receive such consideration as may be determined to be due to such stockholders pursuant to Section 262 of the DGCL ("*Appraisal Consideration*"). If, after the Effective Time, any such stockholder withdraws his demand for appraisal or fails to perfect or otherwise loses his right of appraisal, in any case pursuant to the DGCL, his Dissenting Shares shall be deemed to be converted as of the Effective Time into the right to receive shares of Acquiror Common Stock (without any interest thereon)

as provided in Section 2.5(d) hereof or shall be deemed to have remained outstanding as provided in Section 2.7 hereof, as the case may be. Promptly upon receiving any demands for appraisal, withdrawals of demand for appraisal or any other instrument served pursuant to Section 262 of the DGCL, Tenneco shall so notify Acquiror and shall give Acquiror the opportunity to participate in and direct all negotiations and proceedings with respect to any such appraisal demands. Tenneco shall not, without the prior written consent of Acquiror, make any payment with respect to, or settle, offer to settle or otherwise negotiate, any such appraisal demands. From and after the Effective Time, the Surviving Corporation shall be solely responsible for the payment of any and all Appraisal Consideration, and shall indemnify, defend, protect and hold harmless the Industrial Subsidiary, the Shipbuilding Subsidiary and their respective direct and indirect subsidiaries from and against any and all claims, losses, expenses, payments, liabilities and damages (including attorneys' fees) relating to any Dissenting Shares or claims of stockholders holding Dissenting Shares. In order to effect the payment of any Appraisal Consideration, the Surviving Corporation shall establish an escrow with the Exchange Agent (or other escrow agent reasonably acceptable to the Industrial Subsidiary) consisting of an adequate amount of cash from the \$25,000,000 of cash required to be on hand at Tenneco as of the Effective Time pursuant to the Allocation Agreement. The Industrial Subsidiary, the Shipbuilding Subsidiary and their respective direct and indirect subsidiaries shall be deemed third party beneficiaries of this Section 2.6(h) and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 2.6(h).

2.7 New Preferred Stock. Subject to Section 2.6(h) hereof, the shares of New Preferred Stock outstanding immediately prior to the Effective Time shall not be converted or otherwise exchanged pursuant to the Merger and shall remain outstanding immediately after the Effective Time, held by the Persons who were holders of the New Preferred Stock immediately prior to the Effective Time.

ARTICLE III CLOSING AND FILING

3.1 Closing. Unless this Agreement shall have been terminated and the transactions herein contemplated shall have been abandoned pursuant to Section 8.1 hereof, and subject to the satisfaction or, if permissible, waiver of the conditions set forth in Article VII hereof, the closing of the Merger (the "*Closing*") shall take place as promptly as practicable (and in any event within two business days) after satisfaction or waiver of the conditions set forth in Article VII hereof, at the offices of Tenneco Inc., 1010 Milam Street, Houston, Texas, unless another date, time or place is agreed to in writing by the parties hereto; *provided, however*, that if, (i) during the Black-out Period there occurs an event or series of events that, in the opinion of either Tenneco or Acquiror, could reasonably be expected to have a temporary effect on the price of Acquiror Stock, and (ii) but for the provisions of this proviso the Average Acquiror Price would be greater than \$38.3625 or less than \$31.3875 (said dollar amounts to be adjusted on the same basis as is described in the definition of Average Acquiror Common Equity Price), then either Tenneco (in the case the Average Acquiror Price would be greater than \$38.3625 as aforesaid) or Acquiror (in the case the Average Acquiror Price would be less than \$31.3875 as aforesaid) may, by written notice to the other, elect to delay or to restart the commencement of the Average Period (and thereby the Closing) until such day as such temporary effect has ended (but in no event shall the Closing be delayed by more than 15 days and in no event beyond the date specified in Section 8.1(ii) hereof), as determined and specified by the notifying party. The date on which the Closing occurs is referred to in this Agreement as the "*Closing Date*".

3.2 Effective Time. As promptly as practicable after the satisfaction or, if permissible, waiver of the conditions set forth in Article VII hereof, but subject to the terms of Section 3.1 hereof, the parties hereto shall cause the Merger to be consummated by filing a certificate of merger with the Secretary of State of the State of Delaware in such form as required by, and executed in accordance with the relevant provisions of, the DGCL (the date and time of the acceptance of such filing, or such later date or time as set forth therein, being the "*Effective Time*").

ARTICLE IV **REPRESENTATIONS AND WARRANTIES OF TENNECO**

Tenneco hereby represents and warrants to Acquiror and Subsidiary as follows:

4.1 Organization and Existence. Each of Tenneco and the Major Subsidiaries is a corporation validly existing and in good standing under the laws of the jurisdiction of its organization with the corporate power and authority to own its properties and assets and to carry on its business as now being conducted, except where the failure to be so existing and in good standing or to have such power and authority would not have a Material Adverse Effect on Tenneco.

4.2 Capitalization.

(a) As of the dates indicated below, the authorized and outstanding capital stock of Tenneco was as follows:

<u>Class</u>	<u>Authorized as of the date hereof</u>	<u>Outstanding as of March 31, 1996</u>
Common Stock	350,000,000	191,354,932 shares (including 17,358,445 shares held in treasury or by subsidiaries of Tenneco)
Preferred Stock	15,000,000	803,723 shares of \$4.50 Preferred Stock; 391,519 shares of \$7.40 Preferred Stock
Junior Preferred Stock	50,000,000	none

(b) Between March 31, 1996 and the Agreement Effective Date, Tenneco has issued no shares of its capital stock except for shares of Tenneco Common Stock issued upon the exercise of options granted pursuant to the Option Plans or to executives of Tenneco outside the Option Plans.

(c) As of March 31, 1996, except for

(i) Rights issued pursuant to the Rights Agreement and

(ii) options to acquire an aggregate of 5,207,655 shares of Tenneco Common Stock,

there were no outstanding options, warrants, rights, puts, calls, commitments or other contracts, arrangements, or understandings issued by or binding upon Tenneco requiring or providing for, and there were no outstanding securities of Tenneco or its subsidiaries which upon the conversion, exchange or exercise thereof would require or provide for, the issuance by Tenneco of any new or additional equity interests in Tenneco or any other securities of Tenneco which, with notice, lapse of time and/or payment of monies, are or would be convertible into or exercisable or exchangeable for equity interests in Tenneco (each, a "*Tenneco Equity Right*"). Between March 31, 1996 and the Agreement Effective Date, Tenneco has not issued or granted any Tenneco Equity Right except for

(i) Rights issued in connection with the issuance of Tenneco Common Stock as described in Section 4.2(b) hereof and

(ii) options to purchase 11,000 shares of Tenneco Common Stock granted pursuant to the 1994 Stock Plan.

(d) As of the Agreement Effective Date all outstanding shares of Tenneco Stock are, and immediately prior to the Effective Time all outstanding shares of Tenneco Stock and New Preferred Stock will be, validly issued, fully paid and nonassessable and free of any preemptive (or similar) right.

4.3 Authority and Approval. Tenneco has the corporate power and authority, and no other corporate proceedings on the part of Tenneco are necessary, to execute and deliver this Agreement and the Distribution Agreement and to consummate the transactions contemplated hereby and thereby (subject to securing the

approval of the stockholders of Tenneco as contemplated by Section 6.8 hereof, and formal declaration of the dividends necessary to effectuate the Spinoffs and the issuance of the New Preferred Stock). This Agreement has been duly executed and delivered by Tenneco and, assuming this Agreement constitutes a valid and binding obligation of each of Acquiror and Subsidiary, this Agreement constitutes a valid and binding obligation of Tenneco, enforceable against Tenneco in accordance with its terms.

4.4 Financial Statements. The audited financial statements of Tenneco and consolidated subsidiaries as of December 31, 1995 and 1994 and for the three years ended December 31, 1995, included in Tenneco's 1995 Annual Report on Form 10-K, as filed with the Commission, (i) were prepared in accordance with GAAP applied on a consistent basis (except as indicated therein or in the notes thereto) and (ii) fairly present the financial position of Tenneco and consolidated subsidiaries as of the dates thereof and the results of their operations and cash flows for the periods then ended. The unaudited financial statements of Tenneco and consolidated subsidiaries as of March 31, 1996 and 1995 and for the three-month periods ended on each of such dates, included in Tenneco's March 31, 1996 Quarterly Report on Form 10-Q as filed with the Commission, (A) comply in all material respects with the published rules and regulations of the Commission with respect thereto, (B) were prepared in accordance with GAAP, except as otherwise permitted under the Exchange Act and the rules and regulations thereunder, on a consistent basis (except as indicated therein or in the notes thereto) and (C) fairly present the financial position of Tenneco and consolidated subsidiaries as of the dates thereof and the results of their operations and cash flows for the periods then ended, subject to normal year-end adjustments and any other adjustments described herein or in the notes or schedules thereto.

The unaudited pro forma financial information of the Energy Business (including related notes thereto) as of December 31, 1995 included in Exhibit F-1 attached to this Agreement (which were prepared without cash flow statements and treating the Energy Business as if it were a separate entity for the purpose of estimates and judgments of materiality) appropriately reflects all significant pro forma adjustments necessary to and does fairly present the financial position of the Energy Business as of December 31, 1995 and for the year then ended, except that such financial information was prepared on the assumption that the Energy Business had no long-term debt as of December 31, 1995. The historical financial balances included in the unaudited pro forma financial balances included in Exhibit F-1 have been derived from amounts included in the consolidated balances presented in the audited financial statements of Tenneco and consolidated subsidiaries included in Tenneco's December 31, 1995 Annual Report on Form 10-K as filed with the Commission.

The unaudited pro forma financial information of the Energy Business (including related notes thereto) as of March 31, 1996 included in Exhibit F-2 attached to this Agreement (which were prepared without cash flow statements and treating the Energy Business as if it were a separate entity for the purpose of estimates and judgments of materiality) appropriately reflects all significant pro forma adjustments necessary to and does fairly present the financial position of the Energy Business as of March 31, 1996, except that such financial information was prepared on the assumption that the Energy Business had no long-term debt as of March 31, 1996. The historical financial balances included in the unaudited pro forma financial balances included in Exhibit F-2 have been derived from amounts included in the consolidated balances presented in the audited financial statements of Tenneco and consolidated subsidiaries included in Tenneco's March 31, 1996 Quarterly Report on Form 10-Q as filed with the Commission.

The financial statements of Tennessee Gas Pipeline Company, Midwestern Gas Transmission Company and East Tennessee Natural Gas Company as of and for the years ended December 31, 1995 and 1994 included on pages 110 through 123 of each company's respective Federal Energy Regulatory Commission Form 2 were prepared in all material respects in accordance with the accounting requirements of the Federal Energy Regulatory Commission as set forth in its applicable Uniform System of Accounts and published accounting releases.

4.5 Consents and Approvals; No Violations. The execution, delivery and, subject to securing the approval of the stockholders of Tenneco as contemplated by Section 6.8 hereof, formal declaration of the dividends necessary to effectuate the Spinoffs and the issuance of the New Preferred Stock, performance by Tenneco of

this Agreement and the Distribution Agreement and the consummation by Tenneco of the transactions contemplated hereby or thereby do not or will not:

(i) conflict with or result in any breach of any provisions of the certificate of incorporation or bylaws of Tenneco;

(ii) except as contemplated by this Agreement or the Distribution Agreement, require any filing by Tenneco or any Energy Subsidiary with any Governmental Authority, or require Tenneco or any Energy Subsidiary to obtain any permit, authorization, consent or approval from any Governmental Authority;

(iii) after giving effect to the Debt Realignment, result in a violation or breach of, or constitute (with or without due notice or lapse of time or both) a default (or give rise to any right of termination, amendment, cancellation or acceleration) under, any of the terms, conditions or provisions of any note, bond, mortgage, indenture, lease, license, contract, agreement, franchise, permit, concession or other instrument, obligation, understanding, commitment or other arrangement to which Tenneco or any Energy Subsidiary is a party or by which any of them or any of their respective material properties or assets may be bound or affected; or

(iv) violate any Law applicable to Tenneco or any Energy Subsidiary;

except, in the case of each of clauses (ii) through (iv) above, for failures to make filings or obtain permits, authorizations, consents or approvals, violations, breaches or defaults that could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Tenneco.

4.6 *Litigation.* Except as previously disclosed in writing to Acquiror, as of the Agreement Effective Date there are no actions, suits, proceedings or, to the knowledge of Tenneco, governmental investigations or inquiries pending against Tenneco or any of its subsidiaries or their respective properties, assets, operations or businesses which could reasonably be expected to delay, prevent or hinder the consummation of the transactions contemplated hereby or by the Distribution Agreement, and to the knowledge of Tenneco as of the Agreement Effective Date, no such actions, suits, proceedings or governmental investigations or inquiries are threatened.

4.7 *Tenneco SEC Documents; Accuracy of Information.* The information relating to the Energy Business contained in the Tenneco SEC Documents (A) complied, as of the date of filing thereof (or, in the case of any registration statement, on the date it was declared effective), in all material respects with the applicable requirements of the Exchange Act or Securities Act and (B) did not contain, as of the date of filing thereof (or, in the case of any registration statement, on the date it was declared effective), any untrue statement of a material fact or omit to state any material fact necessary in order to have the statements made therein, in light of the circumstances under which they were made, not misleading.

4.8 *No Material Adverse Effect.* Except as previously disclosed to Acquiror in writing prior to the date of this Agreement, between December 31, 1995 and the Agreement Effective Date, there has occurred no Material Adverse Effect on Tenneco.

4.9 *Advisors.* Except for Lazard, Morgan Stanley & Co. Incorporated, and J.P. Morgan Securities Incorporated, which have been retained by Tenneco to assist and advise Tenneco in connection with the transactions contemplated by this Agreement and the Distribution Agreement, Tenneco has not employed any broker, finder or intermediary in connection with such transactions who might be entitled to a fee or commission upon the consummation of this Agreement, the Distribution Agreement or the transactions contemplated hereby or thereby. A copy of the engagement letter between Tenneco and each such advisor has been provided to Acquiror.

4.10 *Opinion of Financial Advisor.* Tenneco has received the opinion of Lazard, dated as of the Agreement Effective Date, to the effect that, as of such date, the consideration to be received in the Merger by Tenneco's stockholders is fair to Tenneco's stockholders from a financial point of view (and Tenneco has the right to refer

to that opinion, so long as such reference is in form and substance satisfactory to Lazard, in the Joint Proxy Statement and other appropriate filings with the Commission and mailings to its stockholders).

4.11 Amendments to Rights Agreement. Tenneco has caused the Rights Agreement to be amended such that

(i) neither a "Triggering Event" nor a "Distribution Date" (in each case as defined in the Rights Agreement) will occur solely by reason of the execution of this Agreement and the consummation of the transactions contemplated hereby, and

(ii) the Rights will expire at the Effective Time.

ARTICLE V

REPRESENTATIONS AND WARRANTIES OF ACQUIROR AND SUBSIDIARY

Acquiror and Subsidiary hereby represent and warrant, jointly and severally, to Tenneco as follows:

5.1 Organization and Existence. Each of Acquiror and Subsidiary is a corporation validly existing and in good standing under the laws of the jurisdiction of its organization with the corporate power and authority to own its properties and assets and to carry on its business as now being conducted, except where the failure to be so existing and in good standing or to have such power and authority would not have a Material Adverse Effect on Acquiror.

5.2 Capitalization.

(a) Acquiror.

(i) As of the Agreement Effective Date, the authorized capital stock of Acquiror consists of:

(A) 100,000,000 shares of Acquiror Common Stock of which, at June 18, 1996, 35,582,074 shares were issued and outstanding and 1,769,151 shares were held in treasury (including shares held in Acquiror's Benefits Protection Trust); and

(B) 25,000,000 shares of Preferred Stock, \$.01 par value, none of which are issued and outstanding.

(ii) As of the Agreement Effective Date, except for rights issued pursuant to the Shareholders Rights Agreement, dated as of July 7, 1992, between Acquiror and The First National Bank of Boston and options to acquire an aggregate of 4,066,487 shares of Acquiror Common Stock, there were no outstanding options, warrants, rights, puts, calls, commitments or other contracts, arrangements, or understandings issued by or binding upon Acquiror requiring or providing for, and there were no outstanding securities of Acquiror or its subsidiaries which upon the conversion, exchange or exercise thereof would require or provide for, the issuance by Acquiror of any new or additional equity interests in Acquiror or any other securities of Acquiror which, with notice, lapse of time and/or payment of monies, are or would be convertible into or exercisable or exchangeable for equity interests in Acquiror (each, an "Acquiror Equity Right").

(iii) As of the Agreement Effective Date all outstanding shares of the capital stock of Acquiror are, and immediately prior to the Effective Time all outstanding shares of the capital stock of Acquiror will be, validly issued, fully paid and nonassessable and free of any preemptive (or similar) right.

(b) Subsidiary.

(i) The authorized capital stock of Subsidiary consists of 1,000 shares of common stock, \$1.00 par value, all of which are issued and outstanding.

(ii) There are no outstanding options, warrants, rights, puts, calls, commitments or other contracts, arrangements, or understandings issued by or binding upon Subsidiary requiring or providing for, and there were

no outstanding securities of Subsidiary which upon the conversion, exchange or exercise thereof would require or provide for, the issuance by Subsidiary of any new or additional equity interests in Subsidiary or any other securities of Subsidiary which, with notice, lapse of time and/or payment of monies, are or would be convertible into or exercisable or exchangeable for equity interests in Subsidiary.

(iii) All outstanding shares of the capital stock of Subsidiary are, and immediately prior to the Effective Time all outstanding shares of the capital stock of Subsidiary will be, validly issued, fully paid and nonassessable and free of any preemptive (or similar) right.

5.3 Authority and Approval. Each of Acquiror and Subsidiary has the corporate power and authority, and no other corporate proceedings on the part of Acquiror or Subsidiary are necessary, to execute and deliver this Agreement and to consummate the transactions contemplated hereby. This Agreement has been duly executed and delivered by each of Acquiror and Subsidiary and, assuming this Agreement constitutes a valid and binding obligation of Tenneco, this Agreement constitutes the valid and binding obligation of Acquiror and Subsidiary, enforceable against each of them in accordance with its terms.

5.4 Financial Statements. Acquiror has heretofore delivered to Tenneco complete and correct copies of all filings made by Acquiror pursuant to the Exchange Act since January 1, 1995. The audited consolidated financial statements of Acquiror included in such filings (i) were prepared in accordance with GAAP applied on a consistent basis (except as indicated therein or in the notes thereto) during the periods presented and (ii) fairly present the financial position of Acquiror and its consolidated subsidiaries as of the dates thereof and the results of their operations and cash flows for the periods then ended. The unaudited financial statements included in such filings

(i) comply in all material respects with the published rules and regulations of the Commission with respect thereto,

(ii) were prepared in accordance with GAAP, except as otherwise permitted under the Exchange Act and the rules and regulations thereunder, on a consistent basis (except as may be indicated therein or in the notes or schedules thereto) during the periods presented and

(iii) fairly present the financial position of Acquiror and its consolidated subsidiaries as at the dates thereof and the results of their operations and cash flows for the periods then ended, subject to normal year-end adjustments and any other adjustments described therein or in the notes or schedules thereto.

5.5 Consent and Approvals; No Violation. The execution, delivery and performance by Acquiror and Subsidiary of this Agreement and the consummation by Acquiror and Subsidiary of the transactions contemplated hereby do not and will not:

(i) conflict with or result in any breach of any provisions of the certificate of incorporation, bylaws or other governing documents of Acquiror or Subsidiary,

(ii) except as contemplated by this Agreement, require any filing by Acquiror or any of its subsidiaries (including Subsidiary) with any Governmental Authority or require Acquiror or any of its subsidiaries (including Subsidiary) to obtain any permit, authorization, consent or approval of any Governmental Authority;

(iii) result in a violation or breach of, or constitute (with or without due notice or lapse of time or both) a default (or give rise to any right of termination, amendment, cancellation or acceleration) under, any of the terms, conditions or provisions of any note, bond, mortgage, indenture, lease, license, contract, agreement, franchise, permit, concession or other instrument, obligation, understanding, commitment or other arrangement to which Acquiror or any of its subsidiaries (including Subsidiary) is a party or by which any of them or any of their respective material properties or assets may be bound or affected; or

(iv) violate any Law applicable to Acquiror or any of its subsidiaries (including Subsidiary);

except, in the case of each of clauses (ii) through (iv) above, for failures to make filings or obtain permits, authorizations, consents or approvals, violations, breaches or defaults which could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect on Acquiror.

5.6 *Litigation.* Except as previously disclosed in writing to Tenneco, as of the Agreement Effective Date, there are no actions, suits, proceedings or, to Acquiror's knowledge, governmental investigations or inquiries pending against Acquiror or any of its subsidiaries (including Subsidiary) or their respective properties, assets, operations or businesses which could reasonably be expected to delay, prevent or hinder the consummation of the transactions contemplated hereby and, to the knowledge of Acquiror, no such actions, suits, proceedings or governmental investigations or inquiries are threatened.

5.7 *Acquiror SEC Documents; Accuracy of Information.* The information regarding Acquiror and its consolidated subsidiaries contained in the Acquiror SEC Documents (A) complied, as of the date of filing thereof (or, in the case of any registration statement, on the date it was declared effective), in all material respects with the applicable requirements of the Exchange Act or Securities Act and (B) did not contain, as of the date of filing thereof (or, in the case of any registration statement, on the date it was declared effective), any untrue statement of a material fact or omit to state any material fact necessary in order to have the statements made therein, in light of the circumstances under which they were made, not misleading.

5.8 *No Material Adverse Effect.* Except as previously disclosed to Tenneco in writing prior to the date of this Agreement, between December 31, 1995 and the Agreement Effective Date, there has occurred no Material Adverse Effect on Acquiror.

5.9 *Advisors.* Except for Donaldson, Lufkin & Jenrette ("DLJ"), which has been retained by Acquiror to assist and advise Acquiror in connection with the transactions contemplated by this Agreement, Acquiror has not employed any broker, finder or intermediary in connection with such transactions who might be entitled to a fee or commission upon the consummation of this Agreement or the transactions contemplated hereby.

5.10 *Opinion of Financial Advisor.* Acquiror has received the opinion of DLJ, dated as of the Agreement Effective Date, to the effect that, as of such date, the consideration to be paid in the Merger by Acquiror is fair to Acquiror's stockholders from a financial point of view (and Acquiror has the right to refer to that opinion, so long as such reference is in form and substance satisfactory to DLJ, in the Joint Proxy Statement and other appropriate filings with the Commission and mailings to its stockholders).

5.11 *Due Authorization.* The shares of Acquiror Stock and any Depositary Shares issued in connection with the Merger as contemplated by this Agreement will be duly authorized and will be validly issued, fully paid and nonassessable.

5.12 *No Active Business.* Subsidiary has not engaged in any business and does not have any contractual liabilities, commitments, or obligations (other than pursuant to this Agreement) or any assets (other than cash representing its initial capitalization). Subsidiary has been formed solely for purposes of effectuating the transactions contemplated by this Agreement and having such transactions treated for federal income tax purposes as an acquisition of the outstanding Tenneco Stock by Acquiror in exchange for Acquiror Stock through the Merger of Subsidiary with and into Tenneco pursuant to this Agreement.

5.13 *Ownership of Tenneco Stock.* Neither Acquiror nor Subsidiary is

(i) an "Interested Stockholder" of Tenneco as defined in Article NINTH of the Certificate of Incorporation of Tenneco or

(ii) an "interested stockholder" of Tenneco as defined in Section 203 of the DGCL.

As of the Agreement Effective Date, Acquiror and its Affiliates own (directly or indirectly, beneficially or of record) no shares of Tenneco Stock and neither Acquiror nor any of its Affiliates own any rights to acquire any shares of Tenneco Stock, except pursuant to this Agreement.

ARTICLE VI COVENANTS OF THE PARTIES

6.1 *Conduct of Tenneco and its Subsidiaries.*

(a) Between the Agreement Effective Date and the Effective Time, unless Acquiror shall have consented in writing (such consent not to be unreasonably withheld), and except for

(i) actions taken that either affect solely the Industrial Business or the Shipbuilding Business or only adversely affect the Energy Business to a *de minimis* extent and do not materially delay or prevent consummation of the transactions contemplated hereby,

(ii) actions taken by Tenneco and its Affiliates and subsidiaries (including the Energy Subsidiaries) in order to consummate any of the Merger, the Spinoffs and the other transactions contemplated by this Agreement or the Distribution Agreement, which actions are taken in good faith and either are contemplated by this Agreement or the Distribution Agreement (including the Corporate Restructuring Transactions described therein) or do not have more than a *de minimis* effect on Tenneco or do not materially delay or prevent consummation of the transactions contemplated hereby, or

(iii) actions or matters set forth in Exhibit G attached hereto,

Tenneco shall, and shall cause each of the Energy Subsidiaries to:

(A) use its reasonable best efforts to

(I) operate the Energy Business in good faith and in the ordinary course, consistent with past practices, including, without limitation, with respect to the payment and administration of accounts payable and the collection and administration of accounts receivable, inventory management and control policies and implementation of capital programs for the Energy Business in a timely manner,

(II) preserve substantially intact the present business organization of the Energy Business,

(III) keep available, consistent with the past practices of the Energy Business, the services of the present officers, employees and consultants of Tenneco and each of the Energy Subsidiaries (to the extent they customarily provide services to the Energy Business), and

(IV) preserve the relationships with customers, suppliers and others having business dealings with the Energy Business,

it being understood that

(x) certain employees of Tenneco and the Energy Subsidiaries will also be engaged in activities for the Industrial Business and the Shipbuilding Business, and

(y) the failure of any officer, employee or consultant of the Energy Business to remain an officer, employee or consultant of the Energy Business or to become an officer, employee or consultant of Acquiror or any subsidiary of Acquiror shall not constitute a breach of this covenant;

(B) not amend or otherwise change the certificate of incorporation or bylaws of Tenneco (except as may be necessary or appropriate to effect the transactions contemplated hereby or by the Distribution Agreement);

(C) not issue or authorize the issuance of (except, as to Tenneco, in the ordinary course of business consistent with past practices or as contemplated in this Agreement) or the Distribution Agreement, any shares of any class of the capital stock of Tenneco or any Energy Subsidiary (other than New Preferred Stock) or any options, warrants, convertible securities or other rights of any kind to acquire any shares of such capital stock, or any other ownership interest (including, without limitation, any phantom interest), of Tenneco or any of the Energy Subsidiaries (other than the issuance of Rights and shares of Tenneco Common Stock either

(I) in connection with any dividend reinvestment plan,

(II) upon the exercise of options granted prior to the Agreement Effective Date,

(III) pursuant to the terms of any other Tenneco employee benefit plan with an employee stock fund or employee stock ownership plan feature,

(IV) in accordance with the Rights Agreement, or

(V) as is otherwise permitted pursuant to this Agreement or the Distribution Agreement);

(D) not reclassify, combine, split, subdivide or redeem, purchase or otherwise acquire, directly or indirectly, any class of the capital stock of Tenneco or of any of the Energy Subsidiaries other than acquisitions by a dividend reinvestment plan or by any Tenneco employee benefit plan with an employee stock fund or employee stock ownership plan feature, consistent with the terms thereof and applicable securities laws;

(E) not declare, set aside, make or pay any dividend or other distribution, payable in cash, stock, property or otherwise, with respect to any class of the capital stock of Tenneco or any of the Energy Subsidiaries, except:

(I) in the case of Tenneco, regular dividends (including the regular dividend for the dividend period in which the Effective Time occurs) with respect to the \$4.50 Preferred Stock, the \$7.40 Preferred Stock and the New Preferred Stock and regular quarterly dividends on the Tenneco Common Stock at such times and in such amounts as the Board of Directors of Tenneco in its sole discretion determines;

(II) the Spinoffs;

(III) the issuance of New Preferred Stock; and

(IV) cash dividends declared and paid by any of the Energy Subsidiaries;

(F) with respect to the individuals who will be executive officers or employees of the Energy Business after the Effective Time, not:

(I) increase the compensation payable or to become payable to any of such executive officers or employees except for increases in the ordinary course of business in accordance with past practices;

(II) grant any severance or termination pay to, or enter into any employment or severance agreement with, any executive officer of the Energy Subsidiaries; or

(III) except as contemplated in this Agreement or in the Distribution Agreement, establish, adopt, enter into or amend or take action to accelerate any rights or benefits under, any collective bargaining, bonus, profit sharing, thrift, compensation, stock option, restricted stock, pension, retirement, deferred compensation, employment, termination, severance or other plan, agreement, trust, fund, policy or arrangement for the benefit of any such director, executive officer or employee;

provided, however, that Tenneco may continue to provide benefits under employee benefit plans and incentive compensation plans that are in effect on the Agreement Effective Date;

(G) not take, or permit any of its subsidiaries in respect of which it has the direct or indirect voting power to control to take, any action that would reasonably likely result in any of the conditions to the

Merger set forth in Article VII of this Agreement not being satisfied or that would materially impair the ability of Tenneco to consummate the Spinoffs in accordance with the terms of the Distribution Agreement or the Merger in accordance with the terms hereof or would materially delay such consummation or that would disqualify either of the Spinoffs as a tax free distribution within the meaning of Section 355 of the Code;

(H) not implement any change in its accounting principles, practices or methods, other than as (X) may be required by GAAP, the Financial Accounting Standards Board, the Commission or any other Governmental Authority or oversight agency and (Y) relating solely to the Shipbuilding Group and/or the Industrial Group;

(I) except in the ordinary course of business, consistent with past practices, with respect to inventory or services or except where the effect on the Energy Business would be *de minimis*, not, with respect to the Energy Business, transfer, lease, license, sell, mortgage, pledge or dispose of any property or assets included in the Energy Assets or otherwise encumber any property or assets included in the Energy Assets;

(J) not release any third party from, or amend, modify or waive any provisions of, any confidentiality or standstill agreement to which Tenneco is a party (except any that relate solely to the Industrial Business or the Shipbuilding Business);

(K) file on or before the due date therefor all tax returns required to be filed by Tenneco or any Energy Subsidiary, which tax returns shall, to the extent such tax returns relate to the Energy Business, be (i) complete and correct in all material respects and (ii) prepared in accordance and on a basis consistent with the elections, accounting methods, conventions and principles of tax returns used for the most recent taxable periods for which tax returns involving similar tax items have been filed; and

(L) not make, change or revoke any tax election relating to the Energy Business to the extent such election may have more than a *de minimis* effect on the Energy Business or Acquiror, or enter into any material agreement or settlement regarding taxes relating to the Energy Business with any tax authority to the extent such settlement or agreement may have a more than *de minimis* effect on the Energy Business or Acquiror.

(b) Prior to the Effective Time, Tenneco shall cause all stock options issued under the Option Plans (or to executives outside the Option Plans) to be

- (i) converted to options to acquire the stock of the Industrial Company or the Shipbuilding Company;
- (ii) exercised; and/or
- (iii) cancelled.

Tenneco shall also cause all such options not held by employees of the Energy Business to be so converted if not exercised or cancelled prior to the Effective Time in accordance with their terms. All such options held by employees of the Energy Business shall become exercisable prior to the Effective Time and, if not exercised by the Effective Time, shall be cancelled.

(c) Between the Agreement Effective Date and the Effective Time, Tenneco shall cause the Industrial Subsidiary to succeed to sponsorship of the SECT. To the extent the SECT continues to own Tenneco Stock, the SECT will participate in the Merger, the Spinoffs and the conversion of shares pursuant to Section 2.5 hereof (and the other transactions contemplated by this Agreement and/or the Distribution Agreement) as any other stockholder of Tenneco.

(d) Tenneco shall have the right, and shall use its reasonable best efforts to, issue shares of New Preferred Stock prior to the Effective Time on the following basis:

- (i) the issuance may be effected through public sale or private placement (either United States or foreign, but with a placement agent mutually and reasonably acceptable to both Tenneco and Acquiror), or

if such sale or placement is not reasonably practicable under the circumstances, through a dividend-in-kind to the holders of Tenneco Common Stock, but shall in any event be in accordance with all applicable securities and other Laws (and, if publicly issued or issued as a dividend-in-kind, shall be listed on the NYSE);

(ii) the NPS Value shall be approximately 25% (but in no event 20% or less) of the sum of:

(x) the NPS Value, plus

(y) the market value of all outstanding Tenneco Common Stock (as determined as of the Effective Time pursuant to the same procedure as applies to determining the NPS Value).

(e) Prior to the Effective Time, Tenneco shall cause the elimination of all intercompany accounts (including accounts and notes receivable and payable) between members of the Energy Group, the Shipbuilding Group and the Industrial Group, as the case may be (except trade accounts incurred in the ordinary course of business), as set forth in the Distribution Agreement.

(f) From and after the Agreement Effective Date, Tenneco shall afford Acquiror and its officers, employees, representatives and agents the opportunity to participate with Tenneco in the process of obtaining the rulings set forth in the IRS Ruling Request, including the right to participate in the submission of written materials by Tenneco to the Internal Revenue Service, and in-person and telephonic conferences between Tenneco and the Internal Revenue Service, to the extent such communications relate to the IRS Ruling Request. Notwithstanding the foregoing, Tenneco shall have the right, subject to prior consultation with Acquiror, to determine, in its reasonable discretion, that Acquiror's participation in certain communications with the Internal Revenue Service (or any other aspects of the rulings process) may hinder or delay Tenneco's ability to obtain the rulings requested in the IRS Ruling Request, in which case Acquiror will be precluded from such participation; provided, that Tenneco shall promptly inform Acquiror of the substance of any matter in which Acquiror does not participate.

(g) In the event that, between the Agreement Effective Date and the Closing Date, the General Counsel or an Executive Vice President of Tenneco becomes aware that the Energy Business has the realistic opportunity to exercise its right of first refusal with respect to the acquisition of additional interests in the Oasis pipeline or otherwise to acquire additional interests in the Oasis pipeline, Tenneco shall notify Acquiror thereof and shall consult and cooperate with Acquiror prior to exercising its right of first refusal or making any acquisition proposal. Any exercise of such right of first refusal or other acquisition of interests in the Oasis pipeline by the Energy Business shall be subject to the consent of Acquiror, which consent shall not be unreasonably withheld or delayed.

6.2 Conduct of the Business of Acquiror and its Subsidiaries.

(a) Between the Agreement Effective Date and the Effective Time, neither Acquiror nor Subsidiary nor any of their Affiliates shall:

(i) take any action that would be reasonably likely to result in any of the conditions to the Merger set forth in Article VII of this Agreement not being satisfied or that would impair the ability of Acquiror or Subsidiary to consummate the Merger in accordance with the terms hereof or delay such consummation;

(ii) acquire (directly or indirectly, beneficially or of record), any shares of Tenneco Stock (or any rights to acquire any such shares, except pursuant to this Agreement); or

(iii) amend or otherwise change its certificate of incorporation (except as is contemplated by this Agreement in respect of the designation of the Acquiror Preferred Stock), bylaws or other organizational documents; provided, however, that the provisions of this clause (iii) shall not apply to any Affiliate of Acquiror or Subsidiary if the amendment or other change would not adversely effect any of the rights or benefits hereunder or under any of the Ancillary Agreements of Tenneco or the holders of Tenneco Stock (other than to a *de minimis* extent) or otherwise materially delay or prevent the consummation of the transactions contemplated hereby.

(b) Acquiror shall not, and shall not permit any of its subsidiaries (including Subsidiary) to, take or cause or permit to be taken any action that would disqualify either of the Spinoffs as a tax-free distribution within the meaning of Section 355 of the Code.

(c) Between the Agreement Effective Date and the Effective Time, Subsidiary shall not engage in any activities of any nature except as provided in, or in connection with the transactions contemplated by, this Agreement.

6.3 Access to Information; Confidentiality.

(a) Between the date of this Agreement and the Effective Time, and except as may otherwise be required by applicable law, each of Tenneco and Acquiror shall (and shall cause its subsidiaries and officers, directors, employees, auditors and agents to) afford the officers, employees and agents of the other party (the "*Respective Representatives*") reasonable access at all reasonable times to its officers, employees, agents, properties, offices, plants and other facilities, books and records, and shall furnish such *Respective Representatives* with all financial, operating and other data and information as may be reasonably requested, in each case to the extent that such access and disclosure would not:

(i) violate the terms of any agreement to which the disclosing party or any of its Affiliates is bound or any applicable law or regulation; or

(ii) impair any attorney-client privilege of the disclosing party.

Notwithstanding the foregoing, Tenneco shall not be required (and shall not be required to cause its subsidiaries and officers, directors, employees, auditors and agents) to provide the access, data and information described in the preceding sentence with respect to the Industrial Business or the Shipbuilding Business unless Acquiror has a reasonable interest in obtaining such access, data or information in connection with the Merger.

(b) All information obtained by Tenneco, Acquiror or their *Respective Representatives* pursuant to Section 6.3(a) hereof shall be kept confidential in accordance with the confidentiality agreement, dated March 28, 1996, executed by Acquiror and the confidentiality agreement, dated June 12, 1996, executed by Tenneco.

(c) The Industrial Subsidiary and the Shipbuilding Subsidiary (and their respective direct and indirect subsidiaries and Affiliates) shall be deemed third party beneficiaries of this Section 6.3 and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 6.3.

6.4 Directors' and Officers' Indemnification and Insurance.

(a) For a period of six years after the Effective Time, Acquiror shall not cause or permit any amendment, repeal or other modification of the provisions of

(i) Article IV, Section 14 of the by-laws of the Surviving Corporation, as set forth in Exhibit H attached hereto, or

(ii) Article Eighth of the certificate of incorporation of the Surviving Corporation,

in either case in any manner that would adversely affect the rights thereunder of individuals who at any time prior to the Effective Time were directors, officers or employees of Tenneco or any of its subsidiaries or Affiliates or who are otherwise entitled to indemnification pursuant to such provisions in respect of actions or omissions occurring at or prior to the Effective Time (including, without limitation, the transactions contemplated by this Agreement and the Distribution Agreement), unless such modification is required by the DGCL or applicable federal law, and then only to the extent of such applicable requirements of the DGCL or federal law. To the extent the Surviving Corporation is unable for any reason to fulfill its obligations under the bylaw provisions set forth in Exhibit H attached hereto, Acquiror agrees to pay, perform and discharge all such obligations.

(b) Prior to the Effective Time, Tenneco shall, and from and after the Effective Time the Acquiror and the Surviving Corporation jointly and severally shall, indemnify, defend and hold harmless each Person who is now, has been at any time prior to the date of this Agreement or who becomes prior to Effective Time an officer, director or employee of Tenneco or any of its subsidiaries (collectively, the "*Indemnified Parties*") against all losses, expenses, claims, damages, liabilities or amounts that are paid in settlement of, with the approval of the

indemnifying party (which approval shall not unreasonably be withheld), or otherwise in connection with any claim, action, suit, proceeding or investigation (a "*Claim*"), based in whole or in part on the fact that such Person is or was a director, officer or employee of Tenneco or any of its subsidiaries and arising out of actions or omissions occurring at or prior to the Effective Time (including, without limitation, the transactions contemplated by this Agreement and the Distribution Agreement), whether or not such Claim was asserted prior to, at or after the Effective Time, in each case to the fullest extent permitted under the DGCL or other applicable law (and shall pay expenses in advance of the final disposition of any such Claim to each Indemnified Party to the fullest extent permitted under the DGCL or other applicable law, upon receipt from the Indemnified Party to whom expenses are advanced of any undertaking to repay such advances required by Section 145(e) of the DGCL or other applicable law). Notwithstanding anything contained herein, Tenneco's obligation to indemnify any such person pursuant to this Section 6.4 shall not affect the allocation of liability among the Energy Group, the Industrial Group and Shipbuilding Group pursuant to the Distribution Agreement and any corresponding indemnification rights thereunder.

(c) Without limiting the generality of the foregoing, in the event any Claim is brought against any Indemnified Party (whether arising before or after the Effective Time):

(i) the Indemnified Party may retain counsel satisfactory to him with the consent of Tenneco (or the consent of Acquiror and the Surviving Corporation after the Effective Time) which consent of Tenneco (or, after the Effective Time, Acquiror and the Surviving Corporation) with respect to such counsel retained by the Indemnified Party may not be unreasonably withheld or delayed;

(ii) Tenneco (or, after the Effective Time, Acquiror and the Surviving Corporation) shall pay all reasonable fees and expenses of such counsel for the Indemnified Party promptly as statements therefor are received; and

(iii) Tenneco (or, after the Effective Time, Acquiror and the Surviving Corporation) will use all reasonable efforts to assist in the vigorous defense of any such matter, provided that none of Tenneco, Acquiror or the Surviving Corporation shall be liable for any settlement of any Claim effected without its written consent, which consent, however, shall not be unreasonably withheld.

Any Indemnified Party wishing to claim indemnification under this Section 6.4, upon learning of any such Claim, shall notify Tenneco (or, after the Effective Time, Acquiror and the Surviving Corporation) (but any failure so to notify shall not relieve Tenneco, Acquiror or the Surviving Corporation from any liability which it may have under this Section 6.4, except to the extent such failure materially prejudices such party), and shall deliver to Tenneco (or, after the Effective Time, Acquiror and the Surviving Corporation) any undertaking required by Section 145(e) of the DGCL or other applicable law. The Indemnified Parties as a group may retain only one law firm to represent them with respect to each such Claim unless there is, under applicable standards of professional conduct, a conflict on any significant issue between the positions of any two or more Indemnified Parties.

(d) (i) *Maintenance of D&O Policies.* On or prior to the Closing Date, Tenneco shall provide Acquiror with copies and a schedule of those Directors' and Officers' Liability Insurance Policies which Tenneco shall enter into effective as of the Closing Date (the "*D&O Policies*"). For a period of seven years after the Effective Time, Acquiror and the Surviving Corporation shall cause to be maintained in full force and effect the D&O Policies. Acquiror and the Surviving Corporation shall be jointly and severally responsible for payment of all premiums due as respects the D&O Policies and shall take all other actions necessary or appropriate to maintain the D&O Policies in full force and effect (other than to the extent the available limit of liability of any such D&O Policy may be reduced or exhausted solely as the result of the payment of claims thereunder) for the agreed term of seven years after the Effective Time. If at any time an insurance carrier under any of the D&O Policies becomes unable or unwilling, or it becomes probable that such insurance carrier will be unable or unwilling (which determination shall be made in the reasonable discretion of the Industrial Subsidiary), to fulfill any of its obligations under any D&O Policy, whether due to such insurance carrier's dissolution, bankruptcy, insolvency or otherwise, then Acquiror and the Surviving Corporation shall obtain a directors' and officers' liability

insurance policy in substitution (with an insurance carrier acceptable to the Industrial Subsidiary) of each D&O Policy under which such insurance carrier was to provide coverage (a "*Replacement D&O Policy*"), which shall provide at least the same coverage and amounts, and contain terms and provisions which are no less favorable to the insured parties, as existed under the D&O Policy so replaced. Acquiror and the Surviving Corporation shall pay any costs associated with the obtaining and maintenance of any Replacement D&O Policy as contemplated hereby.

(ii) *Ownership and Administration of Policies.* The parties hereto agree that the D&O Policies and any Replacement D&O Policy shall be owned by the Industrial Subsidiary. From and after the Effective Time, the Industrial Subsidiary shall be solely responsible for all aspects of service and administration of such policies (other than the payment of any premiums due), including the notification to insurers, and the management, negotiation and settlement, of any claims made under the D&O Policies and any Replacement D&O Policy. From and after the Effective Time, Acquiror and the Surviving Corporation shall have the right to participate in the negotiation and participate in and consent to settlement (such consent not to be unreasonably withheld or delayed) of any claim under the D&O Policies and any Replacement D&O Policy for which, and then only to the extent, that either is obligated to indemnify any of the present or former directors or officers of Tenneco or any of its present or past subsidiaries ("*Directors or Officers*") for liabilities associated with such claim. The Industrial Subsidiary's responsibilities for administering and servicing the D&O Policies and any Replacement D&O Policy shall in no manner restrict, reduce, limit or impair any of the Directors' or Officers' rights to indemnification from Acquiror, the Surviving Corporation or their respective successors or assigns in accordance with any applicable Law, statute, charter or bylaw provision.

(iii) *Cooperation.* Acquiror and the Surviving Corporation shall cooperate with the Directors and Officers in the defense and settlement of any claim made against them based upon or arising out of any actual or alleged wrongful act (as such term may be defined in the applicable D&O Policies or Replacement D&O Policy) occurring at or prior to the Effective Time. Acquiror and the Surviving Corporation shall provide any reasonable assistance or information that may be required by a Director or Officer in connection with any such claim. Neither Acquiror, the Surviving Corporation nor any of their respective representatives shall cause any action or inaction that could reasonably be expected to jeopardize or otherwise impair the rights or ability of the Directors or Officers to recover loss amounts due under the D&O Policies or any Replacement D&O Policy.

(e) Neither Acquiror nor the Surviving Corporation shall take any action that could reasonably be expected to jeopardize or otherwise interfere with the ability of any of the Indemnified Parties to collect any proceeds payable under any of the D&O Policies.

(f) Each of Tenneco, Acquiror and Subsidiary acknowledges and agrees that the Industrial Subsidiary's responsibilities hereunder for Claims Administration and Insurance Administration shall not relieve any Person submitting an insured claim under any of the D&O Policies of

(i) the primary responsibility for giving notice of such insured claim accurately, completely and in a timely manner, or

(ii) any other right or responsibility which such Person may have pursuant to the terms of any of the D&O Policies.

(g) This Section 6.4 (and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 6.4) is intended to be for the benefit of, and shall be enforceable by, the Industrial Subsidiary and the Indemnified Parties, their heirs and personal representatives and shall be binding on Tenneco, the Surviving Corporation and Acquiror and each of their respective successors and assigns.

6.5 Notification of Certain Matters. Between the Agreement Effective Date and the Effective Time, Tenneco and Acquiror shall give prompt notice to the other of :

(i) the occurrence or nonoccurrence of any event, the occurrence or nonoccurrence of which would likely cause

(A) any of its representations or warranties contained in this Agreement to be untrue or inaccurate, or

(B) any of its covenants, conditions or agreements contained in this Agreement not to be complied with or satisfied; and

(ii) its (or in the case of Acquiror, Acquiror's or Subsidiary's) failure to comply with or satisfy any of its covenants, conditions or agreements to be complied with or satisfied by it (or, in the case of Acquiror, Acquiror or Subsidiary) at or prior to the Effective Time;

provided, however, that the delivery of any notice pursuant to this Section 6.5 shall not limit or otherwise affect the remedies available hereunder to the party receiving such notice.

6.6 Tax Treatment.

(a) Each of Tenneco, on the one hand, and Acquiror and Subsidiary, on the other hand, intend the Merger to qualify as a reorganization under Code Section 368(a)(1)(B) and the Spinoffs to be treated as tax-free distributions under Code Section 355, and each such party shall use its reasonable best efforts to cause the Merger and Spinoffs to so qualify. Neither Tenneco, on the one hand, nor Acquiror or Subsidiary, on the other hand, shall take any action which might cause

(i) the Merger to fail to qualify as a reorganization under Code Section 368(a)(1)(B),

(ii) the Spinoffs to fail to qualify as tax free distributions under Code Section 355,

(iii) any other transfer described in the Corporate Restructuring Transactions that is intended (as described in Tenneco's request for rulings from the Internal Revenue Service) to qualify as a tax free transfer under Code Sections 332, 351, 355 or 368 to fail to so qualify, or

(iv) Tenneco or any Energy Subsidiary to recognize any gains relating to deferred intercompany transactions or excess loss accounts between or among any members of the affiliated group of corporations of which Tenneco is the common parent (other than those deferred intercompany gains listed on Exhibit I attached hereto).

(b) In furtherance of Section 6.6(a) above, Tenneco shall make the representations set forth in Exhibit J attached hereto, and such other representations as are reasonably necessary to ensure the tax-free treatment of the Merger, Spinoffs and related transactions described in Section 6.6(a) above, and shall assure the continuing accuracy of such representations.

(c) In furtherance of Section 6.6(a) above, Acquiror and Subsidiary shall each make the representations set forth in Exhibit J attached hereto, and such other representations as are reasonably necessary to ensure the tax-free treatment of the Merger, Spinoffs and related transactions described in Section 6.6(a) above, and shall assure the continuing accuracy of such representations.

(d) The Industrial Subsidiary and the Shipbuilding Subsidiary (and their respective direct and indirect subsidiaries and Affiliates) shall be deemed third party beneficiaries of this Section 6.6 and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 6.6.

6.7 Registration Statement; Joint Proxy Statement; NPS Materials; Tender and Exchange Materials.

(a) As promptly as practicable after the Agreement Effective Date, Tenneco and Acquiror shall prepare and file, or cause to be prepared and filed, with the Commission a joint proxy statement (the "*Joint Proxy Statement*") and other proxy solicitation materials relating to the Stockholders' Meeting (as defined in Section 6.8 hereof), and Acquiror shall prepare and file, or cause to be prepared and filed, with the Commission a registration statement on Form S-4 in which the Joint Proxy Statement shall be included as a prospectus (the "*Registration Statement*"), in connection with the registration under the Securities Act of the shares of Acquiror Stock (and any Depositary Shares) to be issued to the stockholders of Tenneco pursuant to the Merger.

Each of Acquiror and Tenneco shall furnish or cause to be furnished to the other party all information concerning itself and its subsidiaries as the other party may reasonably request in connection with such actions and the preparation of the Registration Statement and the Joint Proxy Statement (and in connection with the preparation of the NPS Materials and the Tender and Exchange Materials). Each of Acquiror and Tenneco hereby agree to take, and to cause their respective subsidiaries to take,

(i) such actions as may be required to have the Registration Statement and, to the extent applicable, the NPS Materials and the Tender and Exchange Materials declared effective under the Securities Act and to have the Joint Proxy Statement cleared by the Commission, in each case as promptly as practicable, including by consulting with each other as to, and responding promptly to, any Commission comments with respect thereto, and

(ii) such actions as may be required to be taken under applicable state securities or "blue sky" laws in connection with the issuance of shares of Acquiror Stock (and any Depositary Shares) pursuant to the Merger.

As promptly as practicable after the Registration Statement shall have become effective, each of Tenneco and Acquiror shall mail the Joint Proxy Statement to its respective stockholders (and Tenneco and Acquiror shall attempt to effect their respective mailings on the same date), and the Joint Proxy Statement shall include the recommendation of the board of directors of Tenneco in favor of adoption and approval of this Agreement and the Merger and the Spinoffs, and of the board of directors of Acquiror in favor of approval of the Stock Issuance (as defined in Section 6.8 hereof); *provided, however*, that no obligation of Tenneco pursuant to this Section 6.7(a) shall be required to be performed if there is a substantial risk that the performance thereof would constitute a breach of the fiduciary duties of the board of directors of Tenneco as determined by the board of directors of Tenneco in good faith after consultation with and based upon the advice of its independent legal counsel (who may be its regularly engaged independent legal counsel).

(b) Acquiror covenants that the information supplied by or on behalf of Acquiror for inclusion in the Registration Statement and the Joint Proxy Statement shall not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading, at any of:

- (i) the time the Registration Statement (or any amendment or supplement thereto) is declared effective;
- (ii) the time the Joint Proxy Statement (or any amendment or supplement thereto) is first mailed to the stockholders of Tenneco and Acquiror;
- (iii) the time of each of the Stockholders' Meetings; and
- (iv) the Effective Time.

Likewise, Acquiror covenants that the information and data supplied by or on behalf of Acquiror for inclusion in the NPS Materials and Tender and Exchange Materials (including, without limitation, all information and financial data (pro forma or otherwise) relating to the business and operations of Tenneco following consummation of the Merger supplied by or on behalf of Acquiror) shall not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading, at all times through the completion of (A) in the case of the NPS Materials, the offering and sale of the New Preferred Stock, and (B) in the case of the Tender and Exchange Materials, the tender and exchange offers pursuant to the Debt Realignment.

(c) Tenneco covenants that the financial information (including pro forma financial data and information) supplied or to be supplied by Tenneco or its representatives for inclusion or incorporation by reference in the Registration Statement or the Joint Proxy Statement (or the NPS Materials and/or Tender and Exchange Materials) shall comply as to form in all material respects with applicable accounting requirements and with the published rules and regulations of the Commission with respect thereto, shall be prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto)

or, in the case of unaudited financial information, as permitted by the rules of the Commission) and shall fairly present (subject, in the case of unaudited financial information, to normal, recurring audit adjustments) the financial information reflected therein as of the dates thereof or for the periods then ended. The Joint Proxy Statement shall, as it relates to the Tenneco Stockholders' Meeting, comply as to form in all material respects with the provisions of the Exchange Act and the rules and regulations thereunder, except that no representation is herein made by Tenneco with respect to statements made in the Joint Proxy Statement based on information supplied by Acquiror or any of its representatives for inclusion in the Joint Proxy Statement or with respect to information concerning Acquiror or any of its subsidiaries (including Subsidiary) incorporated by reference in the Joint Proxy Statement. If at any time prior to the Effective Time any event or circumstance relating to Acquiror or any of its subsidiaries (including Subsidiary), their respective officers or directors, or Acquiror's plans and intentions regarding its operation of the Surviving Corporation after the Merger should be discovered by Acquiror or any of its subsidiaries (including Subsidiary) that should be set forth in an amendment or a supplement to the Registration Statement or Joint Proxy Statement (or in any of the NPS Materials or Tender and Exchange Materials), Acquiror shall promptly inform Tenneco in writing.

(d) Tenneco covenants that the information supplied by or on behalf of Tenneco for inclusion in the Registration Statement and the Joint Proxy Statement shall not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading, at

- (i) the time the Registration Statement (or any amendment or supplement thereto) is declared effective,
- (ii) the time the Joint Proxy Statement (or any amendment or supplement thereto) is first mailed to the stockholders of Tenneco and Acquiror,
- (iii) the time of each of the Stockholders' Meetings, and
- (iv) the Effective Time.

Likewise, Tenneco covenants that the NPS Materials and Tender and Exchange Materials shall not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading, at all times through the completion of (A) in the case of the NPS Materials, the offering and sale of the New Preferred Stock, and (B) in the case of the Tender and Exchange Materials, the tender and exchange offers pursuant to the Debt Realignment; provided, that the foregoing provisions of this sentence shall not apply to any information or financial data (including pro forma financial information and data) supplied by or on behalf of Acquiror, including information and data relating to the business and operations of Tenneco following consummation of the Merger.

(e) Acquiror covenants that the financial information (including pro forma financial data and information regarding Acquiror or Tenneco) supplied or to be supplied by Acquiror or its representatives for inclusion or incorporation by reference in the Registration Statement or the Joint Proxy Statement (or the NPS Materials or Tender and Exchange Materials) shall comply as to form in all material respects with applicable accounting requirements and with the published rules and regulations of the Commission with respect thereto, shall be prepared in accordance with GAAP applied on a consistent basis during the periods involved (except as may be indicated in the notes thereto or, in the case of unaudited financial information, as permitted by the rules of the Commission) and shall fairly present (subject, in the case of unaudited financial information, to normal, recurring audit adjustments) the financial information reflected therein as of the dates thereof or for the periods then ended. Each of the Joint Proxy Statement, as it relates to the Acquiror Common Stockholders' Meeting, and the Registration Statement will comply as to form in all material respects with the provisions of the Exchange Act and the rules and regulations thereunder or the Securities Act and the rules and regulations thereunder, as applicable, except that no representation is herein made by Acquiror with respect to statements made in the Joint Proxy Statement or Registration Statement based on information supplied by Tenneco or any of its representatives for inclusion in the Joint Proxy Statement or Registration Statement or with respect to information concerning Tenneco or any of its subsidiaries incorporated by reference in the Joint Proxy Statement or

Registration Statement. If at any time prior to the Effective Time any event or circumstance relating to Tenneco or any of its subsidiaries, or their respective officers or directors, should be discovered by Tenneco or any of its subsidiaries which should be set forth in an amendment or a supplement to the Registration Statement or Joint Proxy Statement (or in any of the NPS Materials or Tender and Exchange Materials), Tenneco shall promptly inform Acquiror in writing.

(f) None of the Joint Proxy Statement, the Registration Statement, the NPS Materials or the Tender and Exchange Materials shall be filed or distributed, and, prior to the termination of this Agreement, no amendment or supplement to the Joint Proxy Statement or the Registration Statement shall be filed or distributed, by or on behalf of Tenneco or Acquiror, without consultation with the other party and its counsel.

6.8 Stockholders' Meetings. Tenneco shall call and hold a meeting of its stockholders (the "*Tenneco Stockholders' Meeting*") for the purpose of voting upon the adoption and approval of this Agreement, the Merger and the Spinoffs. Acquiror shall call and hold a meeting of its stockholders (the "*Acquiror Common Stockholders' Meeting*") for the purpose of voting upon the approval of the issuance of Acquiror Common Stock in connection with the Merger as contemplated by this Agreement (the "*Stock Issuance*") (the Acquiror Common Stockholders' Meeting and the Tenneco Stockholders' Meeting being collectively referred to herein as the "*Stockholders' Meetings*"). Each of Tenneco and Acquiror shall use its reasonable best efforts to schedule and hold their respective Stockholders' Meetings so that the Acquiror Common Stockholders' Meeting occurs at least one business day prior to the Tenneco Stockholders' Meeting, and otherwise so as not to delay the transactions contemplated hereby (it being intended that the Joint Proxy Statement shall be mailed and the Stockholders' Meetings shall be scheduled to occur as soon as practicable after the receipt of the IRS Ruling Letter). Each of Tenneco and Acquiror shall use its reasonable best efforts to solicit from its stockholders proxies in favor of the approval and adoption of this Agreement, the Merger and the Spinoffs or the Stock Issuance, as applicable, and shall take all other action necessary or advisable to secure the vote or consent of stockholders required therefor by applicable Law and/or its certificate of incorporation or other governing instrument or document. The stockholders of Tenneco will vote on the Spinoffs and the Merger as a single transaction. Notwithstanding the foregoing, Tenneco shall not be required to take any action if there is a substantial risk that the subject action would constitute a breach of the fiduciary duties of the board of directors of Tenneco as determined by the board of directors of Tenneco in good faith after consultation with and based upon the advice of independent legal counsel (who may be its regularly engaged independent legal counsel).

6.9 Further Action; Reasonable Best Efforts.

(a) Upon the terms and subject to the provisions of this Agreement, each of the parties hereto shall use its reasonable best efforts to take, or cause to be taken, all appropriate action, and to do, or cause to be done, all things necessary, proper or advisable under applicable laws and regulations promptly to consummate and make effective the transactions contemplated hereby and by the Distribution Agreement (subject, however, to the vote of the stockholders of Tenneco and, to the extent required, Acquiror as provided herein), including, without limitation, using its reasonable best efforts to obtain all licenses, permits, consents, approvals, authorizations, qualifications and orders of Governmental Authorities and parties to contracts with Tenneco and, to the extent required, Acquiror and their respective subsidiaries as are necessary for the consummation of the transactions contemplated by this Agreement. Each party hereto shall promptly consult with each other party with respect to, and provide to each other party all such information or documentation which shall be reasonably requested with respect to, all filings made by such party with any Governmental Authority in connection with this Agreement and the transactions contemplated hereby. In case at any time after the Effective Time any further action is necessary or desirable to carry out the purposes of this Agreement, the proper officers and directors of each party to this Agreement shall use their reasonable best efforts to take all such action.

(b) Between the Agreement Effective Date and the Closing Date,

(i) Tenneco and Acquiror shall, and shall cause their respective Affiliates and representatives to, consult, cooperate and work together in good faith and with reasonable best efforts and all deliberate speed to attempt jointly to obtain a favorable resolution prior to the Effective Time with respect to pending

regulatory proceedings affecting the Energy Business, including sharing ideas and information concerning alternative approaches to resolving such regulatory proceedings and coordinating the timing and content of communications with customers of the Energy Business, affecting the Energy Business, and regulatory authorities having jurisdiction over the operations of the Energy Business; provided, that any settlement (or proposed settlement) of any such regulatory proceedings shall require the consent of both Tenneco and Acquiror, such consent not to be arbitrarily withheld; and

(ii) Tenneco shall, and shall cause its Affiliates and representatives to, consult and work with Acquiror and its Affiliates and representatives to attempt to obtain favorable resolutions of material litigation affecting the Energy Business; provided that, except as otherwise set forth on Exhibit G attached hereto, any settlement (or proposed settlement) of any such litigation shall require the consent of Acquiror, such consent not to be arbitrarily withheld.

(c) Except as set forth on Exhibit G attached hereto, between the Agreement Effective Date and the Closing Date, the Energy Business shall not incur any additional off balance sheet indebtedness for the purpose of monetization of any Energy Assets. Subject to the terms of the previous sentence, Acquiror and Tenneco shall consult and cooperate with each other with respect to off-balance sheet financing opportunities for the Australian assets of the Energy Business, the Orange Cogeneration Project and the South Sulawesi Project and any such off-balance sheet financing may be incurred by mutual agreement between Acquiror and Tenneco.

Between the Agreement Effective Date and the Closing Date, Tenneco shall attempt to cooperate with Acquiror to the extent reasonably requested by Acquiror in connection with sales by the Energy Business after the Closing Date of material Energy Assets; provided that any such transactions shall be subject to the covenants, restrictions and limitations set forth in Section 6.6 hereof.

(d) Between the Agreement Effective Date and the Closing Date, Tenneco shall, to the extent permitted by law, consult and work in good faith with Acquiror with respect to the payment and administration of accounts payable, inventory levels and policies and the collection and administration of accounts receivable of the Energy Business and the making of capital expenditures by the Energy Business to preserve the value of the Energy Business and not to artificially delay payment of accounts payable, accelerate collections of accounts receivable, alter inventory levels or unreasonably delay capital expenditures; provided, however, that Tenneco shall have the right to effect the actions and transactions identified on Exhibit G attached hereto. To the extent permitted by Law, Tenneco shall consult with Acquiror with respect to other matters pertaining to the operation of the Energy Business. Each of Tenneco and Acquiror shall designate one or more members of management to act as coordinators with respect to the matters covered by this Section 6.9.

(e) Each party shall use its reasonable best efforts to not take any action, or enter into any transaction, that would cause any of its representations or warranties contained in this Agreement to be untrue or result in a breach of any covenant made by it in this Agreement.

(f) The Industrial Subsidiary shall be a deemed third party beneficiary of this Section 6.9 and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 6.9.

6.10 Public Announcements. Each party hereto shall consult with each other before issuing any press release or otherwise issuing any other similar written public statement with respect to this Agreement or the Merger and shall not issue any such press release or make any such public statement without the prior consent of each other party, which shall not be unreasonably withheld; *provided, however*, that a party may, without the prior consent of any other party, issue such press release or other similar written public statement as may be required by law or any listing agreement with a national securities exchange to which Tenneco or Acquiror is a party if it has used all reasonable efforts to consult with such other party and to obtain such party's consent but has been unable to do so in a timely manner. Further, the parties shall use their respective reasonable best efforts to coordinate and jointly schedule and interface with the various Governmental Authorities and ratings agencies and other applicable bodies and groups involved or otherwise interested in the transactions contemplated by this Agreement.

6.11 Listing of Acquiror Common Stock and Depositary Shares. Acquiror shall use its reasonable best efforts to cause the shares of Acquiror Common Stock and any Depositary Shares to be issued in or in connection with the Merger to be approved for listing on the NYSE and any other national securities exchange on which shares of Acquiror Common Stock may at such time be listed, subject to official notice of issuance prior to the Effective Time.

6.12 Rights Agreement. Except as contemplated by this Agreement, prior to the Effective Time the Board of Directors of Tenneco shall not, without the prior written approval of Acquiror,

(i) amend or supplement the Rights Agreement in any manner that would cause either a "Triggering Event" or a "Distribution Date" (in each case as defined in the Rights Agreement) to occur or to be deemed to have occurred solely by reason of the execution of this Agreement and the consummation of the transactions contemplated hereby, or

(ii) redeem the Rights.

6.13 The Spinoffs. Prior to the Closing, Tenneco shall enter into the Distribution Agreement (with only such amendments or modifications as are not prejudicial, other than to a *de minimis* extent, to the Energy Business or do not materially delay or prevent consummation of the Merger) and shall cause the Industrial Subsidiary and the Shipbuilding Subsidiary to enter into the Distribution Agreement (with only such amendments), and Tenneco shall take, or cause to be taken, all actions and do, or cause to be done, all things necessary to effect the Spinoffs pursuant to the terms of the Distribution Agreement (with only such amendments). Notwithstanding the foregoing, after prior notice to Acquiror, Tenneco may furnish information or enter into negotiations regarding, or enter into an agreement for, any sale, merger or other disposition transaction(s) involving either or both of the Shipbuilding Business and/or the Industrial Business, or any portion of either (an "S/I Transaction"), which may render either or both of the Spinoffs (or any portion thereof) impossible or impracticable; provided, that Tenneco shall not solicit any S/I Transaction involving the Industrial Subsidiary, the Shipbuilding Subsidiary, the Industrial Business as a whole, the Shipbuilding Business as a whole or any other S/I Transaction which could be reasonably predicted to render the Merger impossible or impracticable or materially delay or prevent consummation thereof. Tenneco may enter into any such S/I Transaction in its sole discretion if the subject S/I Transaction would not be adverse, other than to a *de minimis* extent, to Acquiror or the Energy Business (including with respect to any covenants or obligations of a party under this Agreement or the Distribution Agreement) and would not render the Merger impossible or impracticable or materially delay or prevent consummation thereof. If the S/I Transaction would be so adverse to Acquiror or the Energy Business, or would render the Merger impossible or impracticable or materially delay or prevent consummation thereof, then S/I Transaction may be pursued and/or entered into only (a) prior to the approval of this Agreement, the Merger and the Spinoffs by the Tenneco stockholders and (b) if Tenneco's board of directors determines in good faith, after consultation with and based upon the advice of independent legal counsel (which may be Tenneco's regularly engaged independent legal counsel), that there is a substantial risk that the failure to do so would constitute a breach of its fiduciary duties under applicable Law.

6.14 Antitrust Matters.

(a) Tenneco and Acquiror shall file with the Federal Trade Commission and the Department of Justice, as promptly as practicable but in any event within 20 business days of the Agreement Effective Date, the notification and report form required for the transactions contemplated hereby and shall promptly provide any supplemental information which may be reasonably requested in connection therewith pursuant to the HSR Act, which notification, report and supplemental information shall comply in all material respects with the requirements of the HSR Act.

(b) Although the parties do not believe that the Merger has any antitrust implications, Acquiror shall use all reasonable efforts to resolve antitrust objections, if any, that may be asserted with respect to the transactions contemplated hereby by the Federal Trade Commission, the Antitrust Division of the Department of Justice or any other federal or state agency. Acquiror shall make such divestitures, or enter into such hold-separate

agreements, as may be necessary to prevent the entry of, or effect the dissolution of, any injunction, temporary restraining order or other order that has the effect of preventing for any period of time the consummation of the Merger in any respect. Acquiror shall reimburse Tenneco for reasonable attorneys' fees and costs incurred by Tenneco in connection with defending any antitrust investigation or other proceeding brought by any of the above identified entities.

6.15 Employee Matters.

(a) Prior to the Effective Time, Tenneco shall enter into the Benefits Agreement and shall take the actions with respect to compensation and benefits described elsewhere in this Agreement or in the Distribution Agreement.

(b) Acquiror shall provide, or shall cause the Surviving Corporation (or any of its subsidiaries, as appropriate) to provide, to the employees and former employees of the Energy Business and the dependents of either, as applicable, the benefits described in Exhibit K attached hereto.

6.16 Debt Realignment. Each of Tenneco and Acquiror shall use its reasonable best efforts so that, immediately prior to the Spinoffs, the Debt Realignment has been effected (with only such modifications as are not adverse, except to a *de minimis* extent, to Acquiror, the Energy Business, the Industrial Subsidiary or the Shipbuilding Subsidiary).

6.17 No Solicitations. Tenneco shall immediately cease any existing discussions or negotiations with any third parties conducted prior to the date hereof with respect to any merger, consolidation, business combination, sale of the Energy Business, sale of a Major Subsidiary, tender or exchange offer or similar transaction involving the Energy Business as a whole or any Major Subsidiary as a whole, other than the transactions contemplated by this Agreement or the Distribution Agreement (an "*Acquisition Transaction*"). Neither Tenneco nor any of its subsidiaries nor any of their respective directors and officers shall, and Tenneco shall use its best efforts to ensure that none of its or its subsidiaries' Affiliates, representatives or agents shall, directly or indirectly, solicit any person, entity or group concerning any Acquisition Transaction; *provided, however*, that, after prior notice to Acquiror and prior to the approval of this Agreement, the Merger and the Spinoffs by the Tenneco stockholders, Tenneco may furnish information or enter into negotiations regarding, or enter into an agreement for, an Acquisition Transaction if Tenneco's board of directors determines in good faith, after consultation with and based upon the advice of independent legal counsel (which may be Tenneco's regularly engaged independent legal counsel), that there is a substantial risk that the failure to do so would be found to constitute a breach of its fiduciary duties under applicable Law, but only in response to a proposal (which may be subject to due diligence) for an Acquisition Transaction received by Tenneco which the board of directors of Tenneco determines in good faith after consultation with its financial advisors is reasonably likely to result in consummation of an Acquisition Transaction more favorable, from a financial point of view, to the stockholders of Tenneco than the transactions contemplated hereby, taking into account the financial responsibility of the party making such proposal, as then reasonably determinable by Tenneco, and such party's ability, as then reasonably determinable by Tenneco, to obtain regulatory approvals for such Acquisition Transaction (a "*Higher Proposal*"). Tenneco shall advise Acquiror immediately if any proposal of or other indication of interest in a Higher Proposal is received by Tenneco and the terms and conditions thereof and keep Acquiror promptly informed of the status thereof.

6.18 Performance of Agreement and Distribution Agreement. After the Effective Time, Acquiror shall, and shall cause the Surviving Corporation and the Energy Subsidiaries to, perform their respective obligations under this Agreement and the Distribution Agreement and their respective obligations under each and every other agreement to be entered into pursuant to the Distribution Agreement and/or the Spinoffs, and Acquiror hereby guarantees the full and timely payment and performance of all of the respective obligations and covenants of Tenneco, the Surviving Corporation and the Energy Subsidiaries under this Agreement and the Distribution Agreement and their respective obligations under each and every other agreement to be entered into pursuant to the Distribution Agreement and/or the Spinoffs, which are to be performed from and after the Effective Time. Without limiting the generality of the foregoing sentence, the foregoing covenant and guarantee of Acquiror shall

specifically be deemed to apply to the obligations of the Surviving Corporation to make any payments due to the Industrial Subsidiary pursuant to Section 6 of the Tax Sharing Agreement attached to the Distribution Agreement in respect of any Tax Benefit attributable to any Debt Discharge Item (as those terms are defined in the Tax Sharing Agreement). The Industrial Subsidiary and the Shipbuilding Subsidiary are hereby designated as, and deemed to be, third party beneficiaries of this Section 6.18 (and all other provisions of this Agreement necessary or appropriate for purposes of enforcing the terms of this Section 6.18). The covenants and guarantees of Acquiror set forth in this Section 6.18 are not in limitation of or substitution for, but are in addition to, the Guarantees attached hereto as Exhibit L, which shall be executed by Acquiror and delivered to the Industrial Subsidiary and the Shipbuilding Subsidiary on the Closing Date.

6.19 Affiliates of Tenneco. Tenneco shall promptly deliver to Acquiror a letter

(i) identifying all Persons who may be deemed affiliates of Tenneco under Rule 145 of the Securities Act, including, without limitation, all directors and executive officers of Tenneco, and

(ii) representing to Acquiror that Tenneco has advised the Persons identified in such letter of the resale restrictions with respect to shares of Acquiror Common Stock and any Depositary Shares received in connection with the Merger imposed by applicable securities laws. Tenneco shall use its reasonable best efforts to obtain from each Person identified in such letter a written agreement, substantially in the form of Exhibit M.

Tenneco shall use its reasonable best efforts to obtain as soon as practicable from any Person who may be deemed to have become an Affiliate of Tenneco after Tenneco's delivery of the letter referred to above and prior to the Effective Time, a written agreement substantially in the form of Exhibit M.

6.20 Antitakeover Statutes. If any Takeover Statute is or may become applicable to the transactions contemplated hereby, each of the parties hereto and the members of its board of directors shall grant such approvals and take such actions as are necessary so that the transactions contemplated by this Agreement may be consummated as promptly as practicable on the terms contemplated hereby and otherwise act to eliminate or minimize the effects of any Takeover Statute on any of the transactions contemplated by this Agreement; *provided however*, that no party hereto shall be required to take any action if there is a substantial risk that the subject action would be held to constitute a breach of the fiduciary duties of the board of directors of the subject party, as determined by the subject board of directors in good faith after consultation with and based upon the advice of independent legal counsel (who may be the subject party's regularly engaged independent counsel).

6.21 Equity Issuance by Acquiror. Acquiror intends, subject to market conditions, to issue, after the Closing Date, \$150,000,000 to \$250,000,000 of equity securities. The initial press release with respect to the transactions contemplated hereby will include disclosure of Acquiror's intention to effect such issuances of additional equity securities.

6.22 Ruhrgas AG. Between the Agreement Effective Date and the Closing Date, Tenneco shall use its reasonable best efforts to repurchase for cash the equity interest of Ruhrgas AG in Tenneco Energy Resources Corporation, provided that the terms of any such repurchase shall be acceptable to Acquiror. Acquiror shall have the right to participate in any discussions or negotiations with Ruhrgas AG with respect to the foregoing.

6.23 Additional Covenants of Acquiror.

(a) From the Agreement Effective Date through the Effective Time, Acquiror shall not take, enter into or propose, or allow any of its subsidiaries to take, enter into or propose, any action or transaction (other than actions or transactions expressly permitted under this Agreement) which is primarily for the purpose of reducing the value of the transactions contemplated by this Agreement and the Distribution Agreement to the stockholders of Tenneco.

(b) From the Agreement Effective Date through the Effective Time, Acquiror shall not enter into any internal corporate restructuring involving Acquiror and one or more of its direct or indirect subsidiaries.

(c) During the Black-out Period, except as expressly contemplated by this Agreement or the Distribution Agreement in order to effect the transactions described herein or therein:

(i) Acquiror and its subsidiaries shall carry on their respective businesses in the usual, regular and ordinary course in substantially the same manner as heretofore conducted and use all reasonable efforts to preserve intact their present business organizations, and preserve their relationships with customers, suppliers and others having business dealings with them to the end that their goodwill and ongoing businesses shall not be impaired in any material respect at the Effective Time.

(ii) Acquiror shall not, nor shall Acquiror permit any of its subsidiaries to, nor shall Acquiror or any of its subsidiaries propose to, (A) declare or pay any dividends on or make other distributions in respect of any of its capital stock (other than intercompany dividends and regular quarterly dividends on Acquiror Common Stock), (B) split, combine or reclassify any of its capital stock or issue or authorize or propose the issuance of any other securities in respect of, in lieu of or in substitution for shares of its capital stock or (C) repurchase or otherwise acquire any shares of capital stock.

(iii) Except for the issuance of shares of Acquiror Common Stock upon the exercise of outstanding stock options disclosed in Section 5.2 hereof, Acquiror shall not issue, deliver or sell, or authorize or propose the issuance, delivery or sale of, any shares of its capital stock of any class, any debt or securities convertible into, or any rights, warrants or options to acquire, any such shares or convertible securities or debt.

(iv) Acquiror shall not amend or propose to amend its Certificate of Incorporation or By-laws or other organizational documents.

(v) Acquiror shall not, nor shall it permit any of its subsidiaries to, acquire or agree to acquire by merging or consolidating with, or by purchasing a substantial equity interest in or a substantial portion of the assets of, or by any other manner, any business or any corporation, partnership, association or other business organization or division thereof or otherwise acquire or agree to acquire any assets, in each case which are material, individually or in the aggregate, to Acquiror and its subsidiaries taken as a whole.

(vi) Except for sales of inventory and services in the ordinary course of business, Acquiror shall not, nor shall it permit any of its subsidiaries to, sell, lease, encumber or otherwise dispose of, or agree to sell, lease, encumber or otherwise dispose of, any of its assets, which are material, individually or in the aggregate, to Acquiror and its subsidiaries taken as a whole.

(d) If the Stock Issuance is not approved by the requisite vote of the holders of Acquiror Common Stock at the Acquiror Common Stockholders' Meeting, Acquiror, prior to or as of the Effective Time, shall: (i) enter into the Depositary Agreement with the Depositary so that the holders of Tenneco Common Stock are issued Depositary Shares in connection with the Merger and such holders of Depositary Shares will have rights equivalent to those of holders of whole shares of Acquiror Preferred Stock (to the extent of their fractional interest therein); and (ii) issue to the Depositary, and deliver to the Depositary certificates for, the number of shares of Acquiror Preferred Stock provided for in the Section 2.5 (e) (ii) (B) hereof.

(e) From and after the Agreement Effective Date, Acquiror shall use its reasonable best efforts, and shall cause its subsidiaries and Affiliates to use their respective reasonable best efforts, to cause each of the "EPNGC Facilities" (as defined in that certain \$3 Billion Revolving Credit and Competitive Advance Facility Agreement (the "\$3 Billion Credit Agreement") among Tenneco Inc., the several banks and other financial institutions (the "Bank Group") from time to time parties to the \$3 Billion Credit Agreement and The Chase Manhattan Bank, as agent ("Chase"), to become in full force and effect no later than the "Effective Date" under Section 3.1 of the \$3 Billion Credit Agreement, and to remain in full force and effect from said Effective Date through the "Closing Date" under Section 3.2 of the \$3 Billion Credit Agreement. From and after the Agreement Effective Date, Tenneco shall use its reasonable best efforts, and shall cause its subsidiaries and Affiliates to use their respective reasonable best efforts, to cause the \$3 Billion Credit Agreement to become in full force and effect in order to effect the transactions contemplated by the Debt Realignment.

ARTICLE VII
CONDITIONS PRECEDENT

7.1 Conditions to Obligations of Each Party to Effect the Merger. The respective obligations of each party hereto to effect the Merger and the other transactions contemplated herein shall be subject to the satisfaction, at or prior to the Closing, of the following conditions, any or all of which may be waived, in whole or in part, to the extent permitted by applicable law:

(a) **Effectiveness of the Registration Statement.** The Registration Statement shall have been declared effective by the Commission under the Securities Act, no stop order suspending the effectiveness of the Registration Statement shall have been issued by the Commission and no proceedings for that purpose shall have been initiated or, to the knowledge of Tenneco or Acquiror, threatened by the Commission.

(b) **Stockholder Approval.** This Agreement, the Merger and the Spinoffs (and/or any S/I Transaction, if requiring such approval) shall have been approved and adopted by the requisite vote of the stockholders of Tenneco in accordance with the certificate of incorporation of Tenneco and the DGCL.

(c) **HSR Act.** The waiting period under the HSR Act applicable to the transactions contemplated hereby shall have expired or been terminated.

(d) **Other Approvals.** All authorizations, consents, orders and approvals of, and declarations or filings with, and expirations of waiting periods imposed by, any Governmental Authority or other Person which if not obtained or filed would have a Material Adverse Effect on Acquiror or a Material Adverse Effect on Tenneco shall have been obtained or filed, as applicable, and shall be in full force and effect.

(e) **No Order.** No Governmental Authority of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) which is in effect and which materially restricts, prevents or prohibits consummation of the Merger or any transaction contemplated by this Agreement; it being understood that the parties hereto hereby agree to use their reasonable best efforts to cause any such decree, judgment, injunction or other order to be vacated or lifted as promptly as possible.

(f) **NYSE Listing.** The Acquiror Common Stock and any Depositary Shares issuable to stockholders of Tenneco in accordance with Section 2.5 hereof shall have been authorized for listing on the NYSE upon official notice of issuance.

(g) **Tax Ruling.** Tenneco shall have received rulings from the Internal Revenue Service (the "*IRS Ruling Letter*"), reasonably acceptable to Tenneco and Acquiror, to the effect that:

(i) the distribution of the capital stock of the Industrial Subsidiary on a pro rata basis to the stockholders of Tenneco as contemplated under the Distribution Agreement will be tax-free for federal income tax purposes to Tenneco under Section 355(c)(1) of the Code and to the stockholders of Tenneco under Section 355(a) of the Code;

(ii) the distribution of the capital stock of the Shipbuilding Subsidiary on a pro rata basis to the stockholders of Tenneco as contemplated under the Distribution Agreement will be tax-free for federal income tax purposes to Tenneco under Section 355(c)(1) of the Code and to the stockholders of Tenneco under Section 355(a) of the Code;

(iii) The following distributions will be tax free to the respective transferor corporations under Section 355(c)(1) or 361(a) of the Code and to the respective stockholders of the transferor corporation under Section 355(a) of the Code: (A) the distribution by the Shipbuilding Subsidiary of the capital stock of Tenneco Packaging Inc. to Tenneco Corporation as contemplated under the Distribution Agreement, (B) the distribution by Tenneco Corporation of the capital stock of the Shipbuilding Subsidiary and the Industrial Subsidiary to Tennessee Gas Pipeline Company as contemplated under

the Distribution Agreement and (C) the distribution by Tennessee Gas Pipeline Company of the capital stock of the Shipbuilding Subsidiary and the Industrial Subsidiary to Tenneco Inc. as contemplated under the Distribution Agreement.

(h) **Spinoffs Consummated.** The Distribution Agreement, in substantially the form attached hereto with such changes as do not adversely affect, other than to a *de minimis* extent, the Energy Business, shall have been duly executed and delivered by each of Tenneco, the Industrial Subsidiary and the Shipbuilding Subsidiary, and the transactions contemplated thereby, including the Spinoffs (and/or any S/I Transaction) and the Debt Realignment, shall have been consummated (with only such changes).

(i) **Tax Opinion.** Tenneco shall have received an opinion of Jenner & Block, in form and substance substantially as set forth in Exhibit N attached hereto, dated the Closing Date, which opinion may be based on appropriate representations of Tenneco and Acquiror that are in form and substance reasonably satisfactory to Jenner & Block. The condition set forth in this Section 7.1(i) shall be deemed satisfied to the extent the matters referred to as to be covered by the tax opinion are instead covered by the IRS Ruling Letter.

(j) **New Preferred Stock.** The New Preferred Stock shall have been issued by Tenneco and shall be outstanding as set forth in Section 6.1(d) hereof and, if publicly issued or issued as a dividend-in-kind to the stockholders of Tenneco, shall have been authorized for listing on the NYSE upon official notice of issuance.

(k) **Debt Realignment.** The Debt Realignment shall have been effected in accordance with Exhibit C attached hereto.

(l) **Charter Amendment.** The Charter Amendment shall have become effective.

7.2 Additional Conditions to Obligations of Acquiror and Subsidiary. The obligations of Acquiror and Subsidiary to consummate the Merger and the other transactions contemplated herein are also subject to the satisfaction, at the Closing, of all of the following conditions, any one or more of which may be waived, in whole or in part, by Acquiror and Subsidiary:

(a) **Representations and Warranties.** Each of the representations and warranties of Tenneco contained in this Agreement, without giving effect to any notification to Acquiror delivered pursuant to Section 6.5 hereof, shall be true and correct as of the Closing Date as though made on and as of the Closing Date, except

(i) for changes specifically permitted by this Agreement, and

(ii) that those representations and warranties which address matters only as of a particular date shall remain true and correct as of such date,

except in any case for such failures to be true and correct which would not, individually or in the aggregate, have a Material Adverse Effect on Tenneco.

(b) **Agreements and Covenants.** Tenneco shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by it at or prior to the Closing.

(c) **Officers' Certificates.** Acquiror shall have received certificates, dated the Closing Date, of

(i) the President or any Vice President of Tenneco certifying as to the matters specified in Sections 7.2(a) and (b) hereof and

(ii) the Secretary of Tenneco certifying as to (A) the content and continuing effectiveness as of the Closing Date of the resolutions of the board of directors of Tenneco approving this Agreement and the transactions contemplated hereby, and (B) the fact that this Agreement and the transactions contemplated hereby have been duly approved by the requisite vote of the stockholders of Tenneco in accordance with the certificate of incorporation of Tenneco and the DGCL and that such approval is in full force and effect.

(d) *Certain Legislation.* There shall not have occurred any announcement or introduction of legislation by an Appropriate Person as a result of which Acquiror reasonably determines, in good faith after consultation with Tenneco and its advisors, that there exists a reasonable likelihood that the Spinoffs or the Merger would not be tax free for federal income tax purposes to Tenneco and Acquiror. For purposes of this Section 7.2(d), an "Appropriate Person" is a member of the House Ways and Means Committee or the Senate Finance Committee, the President or a President-elect, a cabinet-level member of the Executive Branch, an Assistant Secretary of the Treasury, the Reporting Assistant Secretary of the Treasury for Tax Policy, the Tax Legislation Counsel, the Chief of Staff of the Joint Committee of Taxation or a current or presumptive Majority or Minority Leader of the House or Senate.

7.3 Additional Conditions to Obligations of Tenneco. The obligations of Tenneco to consummate the transactions contemplated hereby are also subject to the satisfaction, at the Closing, of all of the following conditions, any one or more of which may be waived, in whole or in part, by Tenneco:

(a) *Representations and Warranties.* Each of the representations and warranties of Acquiror and Subsidiary contained in this Agreement, without giving effect to any notification made by Acquiror to Tenneco pursuant to Section 6.5 hereof, shall be true and correct as of the Closing Date, as though made on and as of the Closing Date, except

(i) for changes specifically permitted by this Agreement, and

(ii) that those representations and warranties which address matters only as of a particular date shall remain true and correct as of such date,

except in any case for such failures to be true and correct which would not, individually or in the aggregate, have a Material Adverse Effect on Acquiror.

(b) *Agreements and Covenants.* Each of Acquiror and Subsidiary shall have performed or complied in all material respects with all agreements and covenants required by this Agreement to be performed or complied with by it at or prior to the Closing.

(c) *Officers' Certificates.* Tenneco shall have received certificates, dated the Closing Date, of

(i) the President or any Vice President of each of Acquiror and Subsidiary certifying as to the matters specified in Sections 7.3(a) and (b) hereof and

(ii) the Secretaries or Assistant Secretaries of Acquiror and Subsidiary certifying as to (A) the content and continuing effectiveness as of the Closing Date of the resolutions of the sole stockholder of Subsidiary and of the boards of directors of Acquiror and Subsidiary approving this Agreement and the transactions contemplated hereby, and (B) the fact that the Stock Issuance has been duly approved, if required, by the requisite vote of the stockholders of Acquiror in accordance with the rules and regulations of the NYSE, any other applicable Law and the certificate of incorporation and/or other governing document or instrument of Acquiror, and that such approval is in full force and effect, or, alternatively, that no such vote of the stockholders is so required.

ARTICLE VIII TERMINATION

8.1 Grounds for Termination. This Agreement may be terminated at any time prior to the Effective Time, whether before or after adoption and approval of this Agreement, the Merger and the Spinoffs by the stockholders of Tenneco and approval of the Stock Issuance by the stockholders of Acquiror:

(i) by the mutual written agreement of Tenneco and Acquiror authorized by their respective boards of directors;

(ii) by Tenneco or by Acquiror if the Merger shall not have been consummated prior to June 30, 1997 unless such eventuality shall be due to the failure of the party seeking to terminate this Agreement to perform or observe any of the covenants, agreements and conditions hereof to be performed or observed by such party on or prior to the Closing Date;

(iii) by Tenneco or by Acquiror if Tenneco enters into an S/I Transaction pursuant to the last sentence of Section 6.13 above;

(iv) by Acquiror if

(A) there has been a material breach on the part of Tenneco in the representations, warranties or covenants of Tenneco set forth herein, or any failure on the part of Tenneco to comply with its obligations hereunder or any other events or circumstances shall have occurred such that, in any such case, any of the conditions to the consummation of the Merger set forth in Sections 7.1 or 7.2 hereof could not be satisfied on or prior to the termination date contemplated by paragraph (ii) of this Section 8.1,

(B) Tenneco's stockholders entitled to vote thereat do not adopt and approve this Agreement, and the Merger and the Spinoffs as contemplated by Section 7.1(b) hereof at the Tenneco Stockholders' Meeting,

(C) the board of directors of Tenneco withdraws, amends, or modifies in a manner materially adverse to Acquiror its favorable recommendation of this Agreement or the Merger, or approves an agreement for or recommends to the stockholders of Tenneco an Acquisition Transaction, provided that any action taken by Tenneco pursuant to paragraph (v)(A) of this Section 8.1 or any public announcement by Tenneco relating thereto shall not give rise to any right of termination by Acquiror, or

(D) there has occurred since the Agreement Effective Date of any event, change or effect which, in the aggregate with all other events, changes or effects (giving effect to both positive and negative events, changes and events), reduces the value of the Energy Business as of the Agreement Effective Date by more than \$75,000,000, but excluding any negative events, changes or effects which result from (A) any action by Acquiror or any of its subsidiaries, Affiliates, officers, employees, agents or representatives, (B) changes in general economic, financial (including, without limitation, equity and debt) markets or industrial conditions, and (C) any ruling by the Federal Energy Regulatory Commission Administrative Law Judge in the proceedings regarding the Energy Business pending as of the Agreement Effective Date before the Federal Energy Regulatory Commission Administrative Law Judge, or

(v) by Tenneco if

(A) there has been a material breach on the part of Acquiror or Subsidiary in the representations, warranties or covenants of Acquiror or Subsidiary set forth herein, or any failure on the part of Acquiror or Subsidiary to comply in any material respect with its obligations hereunder or any other events or circumstances shall have occurred such that, in any such case, any of the conditions to the consummation of the Merger set forth in Sections 7.1 or 7.3 hereof could not be satisfied on or prior to the termination date contemplated by paragraph (ii) of this Section 8.1,

(B) Tenneco's stockholders entitled to vote thereat do not adopt and approve this Agreement, the Merger and the Spinoffs as contemplated by Section 7.1(b) hereof at the Tenneco Stockholders' Meeting,

(C) the board of directors of Acquiror withdraws, amends, or modifies in a manner materially adverse to Tenneco its favorable recommendation of this Agreement, the Merger or the Stock Issuance, or approves an agreement for or recommends to the stockholders of Acquiror an Acquisition Transaction, provided that any action taken by Acquiror pursuant to paragraph (iv)(A) of this Section 8.1 or any public announcement by Acquiror relating thereto shall not give rise to any right of termination by Tenneco, or

(D) there has occurred since the Agreement Effective Date any event, change or effect which, in the aggregate with all other events, changes or effects (giving effect to both positive and negative events, changes and events), reduces the value of Acquiror as of the Agreement Effective Date by more than \$75,000,000, but excluding any negative events, changes or effects which result from (i) any action by Tenneco or any of its subsidiaries, Affiliates, officers, employees, agents or representatives, and (ii) changes in general economic, financial (including, without limitation, equity and debt) market or industrial conditions; or

(vi) by Tenneco or by Acquiror (but only prior to the approval of this Agreement by Tenneco's stockholders) if

(1) Tenneco receives a Higher Proposal that it advises Acquiror in writing Tenneco wishes to accept and

(2) Acquiror does not make, within five business days of receipt of written notice of Tenneco's desire to accept such Higher Proposal, an offer that the board of directors of Tenneco believes, in good faith after consultation with its financial advisors, is at least as favorable, from a financial point of view, to the stockholders of Tenneco as the Higher Proposal.

8.2 Effect of Termination. If this Agreement is terminated by Tenneco or by Acquiror as permitted under Section 8.1 hereof, except as provided in Section 10.1(b) such termination shall be without liability to the terminating party, or any stockholder, director, officer, employee, agent, consultant or representative of such party, but such termination shall not relieve any other party of any damages or other amounts for which it would otherwise be liable.

8.3 Waiver. Any time prior to the Effective Time any party hereto, by action taken or authorized by its board of directors, may, to the extent legally allowed:

(i) extend the time for the performance of any of the obligations or other acts of the other parties hereto,

(ii) waive any inaccuracies in the representations and warranties of the other parties contained herein or in any document delivered pursuant hereto, and

(iii) waive compliance by any of the other parties hereto with any of the agreements or conditions contained herein. Any waiver of rights by any party hereto shall be valid only if set forth in a written instrument signed on behalf of such party.

ARTICLE IX

EXTENT AND SURVIVAL OF REPRESENTATIONS, WARRANTIES, COVENANTS AND AGREEMENTS

9.1 Scope of Representations. Except as set forth in Articles IV and V hereof, the parties make no representations or warranties whatsoever, and each party disclaims all liability and responsibility for any other representation, warranty, statement or information made or communicated (orally or in writing) to another party (including, but not limited to, any opinion, information or advice which may have been provided to Acquiror or Subsidiary by any officer, stockholder, director, employee, agent or consultant of Tenneco, Lazard or any other agent or representative of Tenneco). Acquiror acknowledges and affirms that it has made its own independent investigation, analysis and evaluation of Tenneco and its subsidiaries, their properties and assets, operations, business and prospects, and that it is relying exclusively upon such investigation, analysis and evaluation in entering into this Agreement.

9.2 Survival. The representations, warranties, covenants and agreements set forth in this Agreement and in any certificate delivered in connection herewith shall survive until the Effective Time and, except for Sections 2.3, 2.6, 6.2(b), 6.3(b), 6.4, 6.6, 6.9(a) and (f), 6.10, 6.14(b), 6.15, 6.18, 9.1 and 9.2 and Article X hereof and

Exhibit J attached hereto, shall terminate and expire at the Effective Time and shall be of no force or effect thereafter. If the Merger is consummated, no party to this Agreement (or any of its present or former Affiliates) shall have any liability to any other party (or any of its present or former Affiliates) for any breaches of this Agreement that occurred prior to the Effective Time, whether or not known at the Effective Time.

ARTICLE X MISCELLANEOUS

10.1 Expenses.

(a) All legal and other costs and expenses shall be paid by Acquiror, Subsidiary or Tenneco, as the case may be, depending upon which party incurred such expenses. Subsequent to the Merger, Acquiror shall cause the Surviving Corporation promptly to pay any and all such costs and expenses (including, without limitation, the fees and expenses of the Exchange Agent and Tenneco's financial advisors, and all legal, accounting and actuarial fees and expenses incurred by Tenneco in connection with this Agreement and the transactions contemplated hereby) incurred by Tenneco prior to the Effective Time which have not been paid as of such time.

(b) In the event that this Agreement shall be terminated pursuant to Section 8.1(iii), 8.1(iv)(B), 8.1(v)(B) or 8.1(vi), Tenneco shall pay to Acquiror, as liquidated damages, in exchange for a complete release of any liabilities of Tenneco hereunder, the amount of \$25,000,000 plus actual out of pocket expenses (up to \$10,000,000) incurred by Acquiror to third parties in connection with the transactions contemplated hereby, payable to an account specified by Acquiror in writing by wire transfer of immediately available funds within 5 business days after the effective date of the subject termination (except that (i) no such amounts shall be payable unless concurrently therewith, Tenneco receives the aforesaid complete release (other than with respect to the items referred to in clause (ii), as to which Acquiror shall deliver a complete release concurrently with the receipt of payment therefor) and (ii) the aforesaid payment for Acquiror's out of pocket expenses shall not be payable unless and until 5 business days after receipt of reasonably satisfactory documentation of the subject expenses). Notwithstanding the foregoing, Tenneco shall have no obligations under this Section 10.1(b) due to any termination of this Agreement pursuant to either Section 8.1(iv)(B) or 8.1(v)(B) unless Tenneco's Board of Directors has withdrawn, amended or modified in a manner materially adverse to Acquiror (other than by reason of a matter referred to in Section 8.1(v)(A) hereof) its recommendation concerning the Merger or the Spinoffs prior to the vote of Tenneco's stockholders which is the subject of Section 8.1(iv)(B) or 8.1(v)(B), as the case may be.

(c) Acquiror shall cause the Surviving Corporation to pay any New York State Tax on Gains Derived from Certain Real Property Transfers (the "Gains Tax"), New York State Real Estate Transfer Tax and New York City Real Property Transfer Tax (the "Transfer Taxes") and any similar taxes in any other jurisdiction (and any penalties and interest with respect to such taxes) that become payable in connection with the Merger, on behalf of the stockholders of Tenneco. Tenneco and Acquiror shall cooperate in the preparation, execution and filing of any required returns with respect to such taxes (including returns on behalf of the stockholders of Tenneco) and in the determination of the portion of the consideration allocable to the real property of Tenneco and the Tenneco subsidiaries in New York State and City (or in any other jurisdiction, if applicable). In order to effect the payment of any transfer taxes subject to this Section 10.1(c), Tenneco shall establish a separately maintained escrow account consisting of an adequate amount of cash from the \$25,000,000 of cash required to be on hand at Tenneco as of the Effective Time pursuant to the Allocation Agreement. The terms of the Joint Proxy Statement shall provide that the stockholders of Tenneco shall be deemed to have agreed to be bound by the allocation established pursuant to this Section 10.1(c) in the preparation of any return with respect to the Gains Tax and the Transfer Taxes and any similar taxes, if applicable.

(d) This Section 10.1 (and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 10.1) shall be enforceable by the Industrial Subsidiary, which is hereby deemed a third party beneficiary hereof.

10.2 Notices. All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or mailed by registered or certified mail, return receipt requested, to the parties at the following addresses:

(A) If to Tenneco, to:

Tenneco Inc.
1275 King Street
Greenwich, Connecticut 06831
Attention: Corporate Secretary

(B) If to the Acquiror or Subsidiary, to:

El Paso Natural Gas Company
One Paul Kayser Center
100 North Stanton Street
El Paso, Texas 79901
Attention: William A. Wise
Chairman and Chief Executive Officer

10.3 Remedies. Any party having any rights under any provision of this Agreement will have all rights and remedies set forth in this Agreement and all rights and remedies which such party may have been granted at any time under any other agreement or contract and all of the rights which such party may have under any law. Any party having any rights or remedies under this Agreement will be entitled to enforce such rights specifically, without posting a bond or other security, to recover damages by reason of any breach of any provision of this Agreement and to exercise all other rights granted by law.

10.4 Consent to Amendments. Prior to the Effective Time, whether before or after approval and adoption of this Agreement by the stockholders of Tenneco, the provisions of this Agreement may be amended by a written agreement executed and delivered by the parties hereto, subject to applicable law (and shall be so amended if expressly required by the terms of this Agreement). After the Effective Time, the provisions of this Agreement may be amended only by a written agreement executed and delivered by Acquiror, the Surviving Corporation and the Industrial Subsidiary. Any purported amendment to this Agreement that does not strictly comply with the foregoing provisions of this Section 10.4 shall be null and void *ab initio*. This Section 10.4 (and all other provisions of this Agreement necessary or appropriate for purposes of enforcing this Section 10.4) shall be enforceable by the Industrial Subsidiary, which is hereby deemed a third party beneficiary hereof.

10.5 Successors and Assignors. No party hereto may assign or delegate any of such party's rights or obligations under or in connection with this Agreement without the written consent of the other parties hereto, and any attempted assignment without such consent shall be null and void *ab initio*. All covenants and agreements contained in this Agreement by or on behalf of any of the parties hereto will be binding upon and enforceable against the respective successors and assigns of such party and will be enforceable by and will inure to the benefit of the respective successors and permitted assigns of such party.

10.6 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement.

10.7 Counterparts. This Agreement may be executed simultaneously in two or more counterparts, any one of which need not contain the signatures of more than one party, but all such counterparts taken together will constitute one and the same Agreement.

10.8 Descriptive Headings. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a part of this Agreement.

10.9 No Third-Party Beneficiaries. Except as expressly provided in Sections 2.6(g), 2.6(h), 6.3, 6.4, 6.6, 6.9, 6.18, 10.1 and 10.4 hereof, this Agreement will not confer any rights or remedies upon any person other than the parties hereto and their respective successors and permitted assigns.

10.10 Entire Agreement. Except for the Confidentiality Agreements identified in Section 6.3(b) hereof, this Agreement constitutes the entire agreement among the parties and supersedes any prior understandings, agreements or representations by or among the parties, written or oral, that may have related in any way to the subject matter hereof.

10.11 Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rule of strict construction will be applied against any party. The use of the word "including" in this Agreement means "including without limitation" and is intended by the parties to be by way of example rather than limitation.

10.12 Incorporation of Exhibits. The Exhibits identified in this Agreement are incorporated herein by reference and made a part hereof.

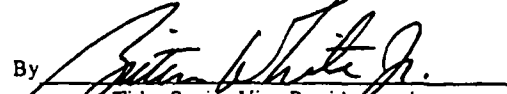
10.13 Governing Law. ALL QUESTIONS AND/OR DISPUTES CONCERNING THE CONSTRUCTION, VALIDITY AND INTERPRETATION OF THIS AGREEMENT AND THE EXHIBITS HERETO SHALL BE GOVERNED BY THE INTERNAL LAWS, AND NOT THE LAW OF CONFLICTS, OF THE STATE OF DELAWARE. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY AND UNCONDITIONALLY AGREES TO BE SUBJECT TO, AND HEREBY CONSENTS AND SUBMITS TO, THE JURISDICTION OF THE COURTS OF THE STATE OF DELAWARE AND OF THE FEDERAL COURTS SITTING IN THE STATE OF DELAWARE.

IN WITNESS WHEREOF, the undersigned have executed this Agreement, as of the date first written above.

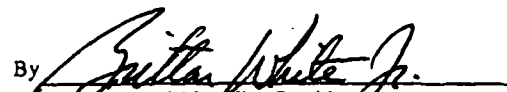
TENNECO INC.

By 
Title: Vice President

EL PASO NATURAL GAS COMPANY

By 
Title: Senior Vice President and
General Counsel

EL PASO MERGER COMPANY

By 
Title: Vice President

**EXHIBIT A TO
AGREEMENT AND PLAN OF MERGER**

DISTRIBUTION AGREEMENT

DISTRIBUTION AGREEMENT

among

TENNECO INC.,

NEW TENNECO INC.

and

**NEWPORT NEWS SHIPBUILDING INC.
(formerly known as Tenneco InterAmerica Inc.)**

dated as of

November 1, 1996

TABLE OF CONTENTS

	<u>Page</u>
ARTICLE I	
DEFINITIONS	A-1
SECTION 1.01. <i>General</i>	A-1
SECTION 1.02. <i>References</i>	A-12
ARTICLE II	
PRE-DISTRIBUTION TRANSACTIONS; CERTAIN COVENANTS	A-13
SECTION 2.01. <i>Corporate Restructuring Transactions</i>	A-13
SECTION 2.02. <i>Pre-Distribution Stock Dividends to Tenneco</i>	A-13
SECTION 2.03. <i>Charters and Bylaws</i>	A-13
SECTION 2.04. <i>Election of Directors of Industrial Company and Shipbuilding Company</i>	A-13
SECTION 2.05. <i>Transfer and Assignment of Certain Licenses and Permits</i>	A-14
SECTION 2.06. <i>Transfer and Assignment of Certain Agreements</i>	A-14
SECTION 2.07. <i>Consents</i>	A-15
SECTION 2.08. <i>Other Transactions</i>	A-15
SECTION 2.09. <i>Election of Officers</i>	A-15
SECTION 2.10. <i>Registration Statements</i>	A-16
SECTION 2.11. <i>State Securities Laws</i>	A-16
SECTION 2.12. <i>Listing Application</i>	A-16
SECTION 2.13. <i>Certain Financial and Other Arrangements</i>	A-16
SECTION 2.14. <i>Director, Officer and Employee Resignations</i>	A-17
SECTION 2.15. <i>Transfers Not Effected Prior to the Distributions; Transfers Deemed Effective as of the Distribution Date</i>	A-17
SECTION 2.16. <i>Ancillary Agreements</i>	A-18
ARTICLE III	
THE DISTRIBUTIONS	A-18
SECTION 3.01. <i>Tenneco Action Prior to the Distributions</i>	A-18
SECTION 3.02. <i>The Distributions</i>	A-19
SECTION 3.03. <i>Fractional Shares</i>	A-19
ARTICLE IV	
CONDITIONS TO THE DISTRIBUTIONS	A-20
SECTION 4.01. <i>Conditions Precedent to the Distributions</i>	A-20
SECTION 4.02. <i>No Constrains</i>	A-21
SECTION 4.03. <i>Deferral of Distribution Date</i>	A-21
SECTION 4.04. <i>Public Notice of Deferred Distribution Date</i>	A-21
ARTICLE V	
COVENANTS	A-22
SECTION 5.01. <i>Further Assurances</i>	A-22
SECTION 5.02. <i>Tenneco Name</i>	A-22
SECTION 5.03. <i>Supplies and Documents</i>	A-22
SECTION 5.04. <i>Assumption and Satisfaction of Liabilities</i>	A-23
SECTION 5.05. <i>No Representations or Warranties; Consents</i>	A-23
SECTION 5.06. <i>Removal of Certain Guarantees</i>	A-24
SECTION 5.07. <i>Public Announcements</i>	A-24
SECTION 5.08. <i>Intercompany Agreements</i>	A-25
SECTION 5.09. <i>Tax Matters</i>	A-25
ARTICLE VI	
ACCESS TO INFORMATION	A-25
SECTION 6.01. <i>Provision, Transfer and Delivery of Applicable Corporate Records</i> ..	A-25
SECTION 6.02. <i>Access to Information</i>	A-26
SECTION 6.03. <i>Reimbursement; Other Matters</i>	A-26
SECTION 6.04. <i>Confidentiality</i>	A-26
SECTION 6.05. <i>Witness Services</i>	A-27
SECTION 6.06. <i>Retention of Records</i>	A-27
SECTION 6.07. <i>Privileged Matters</i>	A-27

	<u>Page</u>
ARTICLE VII INDEMNIFICATION	A-28
SECTION 7.01. <i>Indemnification by Tenneco</i>	A-28
SECTION 7.02. <i>Indemnification by Industrial Company</i>	A-28
SECTION 7.03. <i>Indemnification by Shipbuilding Company</i>	A-28
SECTION 7.04. <i>Limitations on Indemnification Obligations</i>	A-29
SECTION 7.05. <i>Procedures for Indemnification</i>	A-30
SECTION 7.06. <i>Indemnification Payments</i>	A-31
SECTION 7.07. <i>Other Adjustments</i>	A-31
SECTION 7.08. <i>Obligations Absolute</i>	A-32
SECTION 7.09. <i>Survival of Indemnities</i>	A-32
SECTION 7.10. <i>Remedies Cumulative</i>	A-32
SECTION 7.11. <i>Cooperation of the Parties With Respect to Actions and Third Party</i> <i>Claims</i>	A-32
SECTION 7.12. <i>Contribution</i>	A-33
ARTICLE VIII MISCELLANEOUS	A-33
SECTION 8.01. <i>Complete Agreement; Construction</i>	A-33
SECTION 8.02. <i>Ancillary Agreements</i>	A-33
SECTION 8.03. <i>Counterparts</i>	A-33
SECTION 8.04. <i>Survival of Agreements</i>	A-33
SECTION 8.05. <i>Responsibility for Expenses</i>	A-34
SECTION 8.06. <i>Notices</i>	A-34
SECTION 8.07. <i>Waivers</i>	A-34
SECTION 8.08. <i>Amendments</i>	A-34
SECTION 8.09. <i>Assignment</i>	A-35
SECTION 8.10. <i>Successors and Assigns</i>	A-35
SECTION 8.11. <i>Termination</i>	A-35
SECTION 8.12. <i>Third Party Beneficiaries</i>	A-35
SECTION 8.13. <i>Attorney Fees</i>	A-35
SECTION 8.14. <i>Title and Headings</i>	A-35
SECTION 8.15. <i>Exhibits and Schedules</i>	A-35
SECTION 8.16. <i>Specific Performance</i>	A-35
SECTION 8.17. <i>Governing Law</i>	A-35
SECTION 8.18. <i>Severability</i>	A-36
SECTION 8.19. <i>Subsidiaries</i>	A-36
SECTION 8.20. <i>Shipbuilding Hedging Transactions</i>	A-36

EXHIBITS

EXHIBIT A	Benefits Agreement
EXHIBIT B	Corporate Restructuring Transactions
EXHIBIT C	Debt and Cash Allocation Agreement
EXHIBIT D	Energy Business Pro Forma Balance Sheet
EXHIBIT E	Energy Subsidiaries
EXHIBIT F	Industrial Business Pro Forma Balance Sheet
EXHIBIT G	Industrial Subsidiaries
EXHIBIT H	Insurance Agreement
EXHIBIT I	Shipbuilding Business Pro Forma Balance Sheet
EXHIBIT J	Shipbuilding Subsidiaries
EXHIBIT K	Tax Sharing Agreement
EXHIBIT L	TBS Services Agreement
EXHIBIT M	Transition Services Agreement
EXHIBIT N	Form of Restated Certificate of Incorporation
EXHIBIT O	Form of Bylaws
EXHIBIT P	Tenneco Transition Trademark License
EXHIBIT Q	Shipbuilding Transition Trademark License

DISTRIBUTION AGREEMENT

THIS DISTRIBUTION AGREEMENT is made and entered into as of this first day of November, 1996 by and among TENNECO INC., a Delaware corporation ("*Tenneco*"), NEW TENNECO INC., a Delaware corporation ("*Industrial Company*"), and NEWPORT NEWS SHIPBUILDING INC. (formerly known as Tenneco InterAmerica Inc.), a Delaware corporation ("*Shipbuilding Company*").

RECITALS

WHEREAS, Tenneco, El Paso Natural Gas Company, a Delaware corporation ("*Acquiror*"), and El Paso Merger Company, a Delaware corporation and an indirect wholly owned subsidiary of Acquiror ("*Acquiror Subsidiary*"), have entered into an Amended and Restated Agreement and Plan of Merger, dated as of June 19, 1996 (as amended from time to time, the "*Merger Agreement*"), providing for the merger of Acquiror Subsidiary with and into Tenneco (the "*Merger*"), with Tenneco continuing as the surviving corporation of the Merger (the "*Surviving Corporation*"), upon the terms and subject to the conditions set forth in the Merger Agreement;

WHEREAS, the Board of Directors of Tenneco has deemed it appropriate and advisable, prior to the Merger and as contemplated by the Merger Agreement, to:

(a) separate and divide the existing businesses of Tenneco so that (i) the automotive, packaging and business services businesses shall be owned directly and indirectly by Industrial Company, and (ii) the shipbuilding business shall be owned directly and indirectly by Shipbuilding Company; and

(b) distribute, following such separation and division and immediately prior to the Merger, as a dividend to the holders of shares of Common Stock, par value \$5.00 per share, of Tenneco (the "*Tenneco Common Stock*") all of the outstanding shares of common stock, \$.01 par value, of Industrial Company (the "*Industrial Common Stock*") and all of the outstanding shares of common stock, \$.01 par value, of Shipbuilding Company (the "*Shipbuilding Common Stock*");

WHEREAS, following such separation, division and distributions, the remaining businesses, operations, assets and liabilities of Tenneco and its remaining direct and indirect subsidiaries shall be acquired by Acquiror pursuant to the Merger; and

WHEREAS, each of Tenneco, Industrial Company and Shipbuilding Company has determined that it is necessary and desirable to set forth the principal corporate transactions required to effect such separation, division and distributions and to set forth other agreements that will govern certain other matters prior to and following such separation, division and distributions.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained in this Agreement, the parties hereto hereby agree as follows:

ARTICLE I

DEFINITIONS

SECTION 1.01. General. Unless otherwise defined herein or unless the context otherwise requires, the following terms will have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined).

"*Action*" means any action, suit, arbitration, inquiry, proceeding or investigation by or before any Governmental Authority or any arbitration tribunal.

"*Acquiror Subsidiary*" has the meaning ascribed to such term in the recitals to this Agreement.

"*Affiliate*" means, when used with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, controls or is controlled by or is under common control with the Person specified.

"Agent" means First Chicago Trust Company of New York, or such other trust company or bank designated by Tenneco, who shall act as agent for the holders of Tenneco Common Stock in connection with the Distributions.

"Agreement" means this Distribution Agreement by and among Tenneco, Industrial Company and Shipbuilding Company, including any amendments hereto and each Schedule and Exhibit attached hereto.

"Ancillary Agreements" means all of the written agreements, instruments, understandings, assignments or other arrangements (other than this Agreement or the Merger Agreement) entered into by the parties hereto or any other member of their respective Group in connection with the Corporate Restructuring Transactions, the Distributions and the other transactions contemplated hereby or thereby, including, without limitation, the following:

- (i) the Debt and Cash Allocation Agreement;
- (ii) the Insurance Agreement;
- (iii) the Conveyancing and Assumption Instruments;
- (iv) the Benefits Agreement;
- (v) the Tax Sharing Agreement;
- (vi) the Transition Services Agreement;
- (vii) the TBS Services Agreement; and
- (viii) the Transition Trademark License.

"Benefits Agreement" means the Benefits Agreement by and among Tenneco, Industrial Company and Shipbuilding Company, which agreement shall be entered into on or prior to the Distribution Date in the form attached hereto as Exhibit A, except for such changes or modifications thereto that do not, individually or in the aggregate, adversely affect the Energy Business other than to a *de minimis* extent.

"Books and Records" means all books, records, manuals, agreements and other materials (in any form or medium), including without limitation, all mortgages, licenses, indentures, contracts, financial data, customer lists, marketing materials and studies, advertising materials, price lists, correspondence, distribution lists, supplier lists, production data, sales and promotional materials and records, purchasing materials and records, personnel records, manufacturing and quality control records and procedures, blue prints, research and development files, records, data and laboratory books, accounts records, sales order files, litigation files, computer files, microfiche, tape recordings and photographs.

"Code" means the Internal Revenue Code of 1986, as amended, or any successor law.

"Commission" means the United States Securities and Exchange Commission.

"Consents" has the meaning ascribed to such term in Section 2.07 hereof.

"Conveyancing and Assumption Instruments" means, collectively, the various written agreements, instruments and other documents to be entered into to effect the Corporate Restructuring Transactions or to otherwise effect the transfer of assets and the assumption of Liabilities in the manner contemplated by this Agreement, the Ancillary Agreements and the Corporate Restructuring Transactions.

"Corporate Restructuring Transactions" means, collectively, (a) each of the distributions, transfers, conveyances, contributions, assignments and other transactions described and set forth on Exhibit B attached hereto, and (b) such other distributions, transfers, conveyances, contributions, assignments and other transactions (so long as such other distributions, transfers, conveyances, contributions, assignments and other transactions do not, individually or in the aggregate, adversely affect the Energy Business (other than to a *de minimis* extent) or materially delay or prevent the consummation of the Merger) that may be required to be accomplished, effected or consummated by any of Tenneco, Industrial Company,

Shipbuilding Company or any of their respective Subsidiaries and Affiliates in order to separate and divide, in a series of transactions that, to the extent intended to qualify for tax-free transactions under the Code, shall qualify for tax-free treatment under the Code, the existing businesses of Tenneco so that, except as otherwise expressly set forth on Exhibit B hereto:

(i) the Industrial Assets, Industrial Liabilities and Industrial Business shall be owned, directly and indirectly, by Industrial Company;

(ii) the Shipbuilding Assets, Shipbuilding Liabilities and Shipbuilding Business shall be owned, directly and indirectly, by Shipbuilding Company; and

(iii) the businesses, assets and liabilities of Tenneco that remain after the separations and divisions described in clauses (i) and (ii) above, including, without limitation, the Energy Assets, Energy Liabilities and Energy Business, are, after giving effect to the Distributions, owned, directly and indirectly, by Tenneco.

"Debt and Cash Allocation Agreement" means the Debt and Cash Allocation Agreement by and among Tenneco, Industrial Company and Shipbuilding Company, which agreement shall be entered into on or prior to the Distribution Date in the form attached hereto as Exhibit C, except for such changes or modifications thereto that do not, individually or in the aggregate, adversely affect the Energy Business (other than to a *de minimis* extent) or materially delay or prevent the consummation of the Merger.

"Debt Realignment" has the meaning ascribed to such term in the Merger Agreement.

"Debt Realignment Documents" means all documents furnished by Tenneco or Industrial Company to any holders of indebtedness or debt securities of Tenneco or any of its Subsidiaries or filed by Tenneco or Industrial Company in connection therewith with any Governmental Authority or securities exchange in connection with the Debt Realignment.

"Distributions" means the Industrial Distribution and the Shipbuilding Distribution.

"Distribution Date" means such date as may hereafter be determined by Tenneco's Board of Directors as the date on which the Distributions shall be effected.

"Distribution Record Date" means the close of business on the date determined by the Board of Directors of Tenneco for the purpose of determining the holders of record of Tenneco Common Stock entitled to participate in the Distributions.

"DGCL" means the Delaware General Corporation Law, as amended.

"Energy Assets" means, collectively, all the rights and assets owned by Tenneco or any of its Subsidiaries as of the close of business on the Distribution Date other than the Industrial Assets, the Shipbuilding Assets and the capital stock of Industrial Company and Shipbuilding Company, including without limitation:

(i) the capital stock of the Energy Subsidiaries;

(ii) all of the assets included on the Energy Business Pro Forma Balance Sheet which are owned by Tenneco and its Subsidiaries as of the close of business on the Distribution Date and any other asset acquired by Tenneco or any of its Subsidiaries from the date of the Energy Business Pro Forma Balance Sheet to the close of business on the Distribution Date that is owned by Tenneco and its Subsidiaries as of the close of business on the Distribution Date and that is of a type or nature that would have resulted in such asset being included as an asset on the Energy Business Pro Forma Balance Sheet had it been acquired on or prior to the date of the Energy Business Pro Forma Balance Sheet, determined on a basis consistent with the determination of assets included on the Energy Business Pro Forma Balance Sheet; and

(iii) all of the assets and rights expressly allocated to Tenneco or any of the Energy Subsidiaries under this Agreement, any of the Ancillary Agreements or the Merger Agreement.

"Energy Business" means the businesses (other than the Industrial Business and the Shipbuilding Business) that, after giving effect to the Corporate Restructuring Transactions, are or were conducted by:

(i) Tenneco, the Energy Subsidiaries or any of the other members of the Energy Group;

(ii) any other division, Subsidiary or investment of Tenneco, or any Energy Subsidiary or any of the other members of the Energy Group managed or operated or in existence as of the date of this Agreement or any prior time, unless such other division, Subsidiary or investment is expressly included

in either the Industrial Group or the Shipbuilding Group immediately after giving effect to the Corporate Restructuring Transactions; and

(iii) any business entity acquired or established by or for Tenneco or any of the Energy Subsidiaries between the date of this Agreement and the close of business on the Distribution Date that is engaged in, or intends to engage in, any business that is of a type or nature that would have resulted in such business being included either as a Subsidiary or an asset of Tenneco on the Energy Business Pro Forma Balance Sheet had it been acquired or established on or prior to the date of the Energy Business Pro Forma Balance Sheet, determined on a basis consistent with the determination of the Subsidiaries and assets included on the Energy Business Pro Forma Balance Sheet.

"Energy Business Pro Forma Balance Sheet" means the Pro Forma Consolidated Balance Sheet for Tenneco and the Energy Subsidiaries as of June 30, 1996 attached hereto as Exhibit D.

"Energy Group" means Tenneco, the Energy Subsidiaries and the corporations, partnerships, joint ventures, investments and other entities that represent equity investments of Tenneco or any of the Energy Subsidiaries following consummation of the Corporate Restructuring Transactions and the Distributions.

"Energy Indemnitees" means:

(i) Tenneco, the Energy Subsidiaries and each Affiliate thereof after giving effect to the Corporate Restructuring Transactions and the Distributions; and

(ii) each of the respective past, present and future directors, officers, employees and agents of any of the entities described in the immediately preceding clause (i) and each of the heirs, executors, successors and assigns of such directors, officers, employees and agents.

"Energy Liabilities" means, collectively, all of the Liabilities of Tenneco and the Energy Subsidiaries and each of the other members of the Energy Group remaining after giving effect to the Corporate Restructuring Transactions, the Distributions and the transactions contemplated under the Debt and Cash Allocation Agreement, including without limitation:

(i) all of the Liabilities included on the Energy Business Pro Forma Balance Sheet which remain outstanding as of the close of business on the Distribution Date;

(ii) all Liabilities which are incurred or which otherwise accrue or are accrued at any time on, prior to or after the date of the Energy Business Pro Forma Balance Sheet and which arise or arose out of, or in connection with, the Energy Assets or the Energy Business, determined on a basis consistent with the determination of Liabilities of Tenneco included on the Energy Business Pro Forma Balance Sheet;

(iii) all of the Liabilities of Tenneco, the Energy Subsidiaries or any of the other members of the Energy Group under, or to be retained or assumed by Tenneco, any Energy Subsidiary or any of the other members of the Energy Group pursuant to the Corporate Restructuring Transactions, this Agreement, any of the Ancillary Agreements or the Merger Agreement;

(iv) all of the Liabilities of the parties hereto or their respective Subsidiaries (whenever arising whether prior to, on or following the Distribution Date) arising out of or in connection with or otherwise relating to the management or conduct before or after the Distribution Date of the Energy Business;

(v) all Securities Liabilities relating to or arising out of the information and data (financial or otherwise and including pro forma financial data) provided by or on behalf of Acquiror for inclusion in the Registration Statement on Form S-4 of Industrial Company registering certain debt securities of New Tenneco to be exchanged for certain existing debt securities of Tenneco and certain of its Subsidiaries in connection with the Debt Realignment, including, without limitation, information, disclosures and data relating to or concerning Acquiror, Acquiror Subsidiary, the business, operations and management of the Energy Business and/or Energy Group following the Merger and any refinancing or other transactions which Acquiror, Acquiror Subsidiary and/or any member of the Energy Group anticipates consummating following the Merger (collectively **"Energy Exchange Liabilities"**); and

(vi) all other Liabilities of Tenneco, the Energy Subsidiaries or any of the other members of the Energy Group (which do not constitute Industrial Liabilities or Shipbuilding Liabilities), which other Liabilities of Tenneco, the Energy Subsidiaries or any of the other members of the Energy Group shall include, without limitation, any and all Liabilities arising out of or relating to any Action or Third Party Claim by any Governmental Authority or any other Person that is based on (A) any violations or alleged violations by Tenneco, its Subsidiaries (prior to giving effect to the Distributions) and/or any of their respective directors, officers, employees, agents or representatives of any of the provisions of the Exchange Act, Securities Act, or the rules and regulations of the Commission promulgated thereunder or any other securities or similar Law (other than Liabilities (collectively "*Information Statement Liabilities*") for violations or alleged violations that arise out of, or in connection with, the Industrial Information Statement, the Shipbuilding Information Statement or information or data in the Joint Proxy Statement or the Debt Realignment Documents concerning the Shipbuilding Business or the Industrial Business), (B) any alleged breach of fiduciary duty by the Board of Directors of Tenneco or any member thereof, or (C) any stockholder derivative suit or other similar Actions.

"*Energy Records*" has the meaning ascribed to such term in Section 6.01(c) hereof.

"*Energy Subsidiaries*" means the Subsidiaries of Tenneco set forth on Exhibit E hereto and all other Subsidiaries of Tenneco other than Shipbuilding Company, Industrial Company, the Shipbuilding Subsidiaries and the Industrial Subsidiaries.

"*Environmental Laws*" means any and all federal, state, local and foreign statutes, laws, regulations, ordinances, rules, judgments, orders, decrees, permits, concessions, grants, franchises, licenses, agreements or other governmental restrictions (including without limitation the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601, *et seq.*), whether now or hereafter in existence, relating to the environment, natural resources or human health and safety or endangered or threatened species of fish, wildlife and plants or to emissions, discharges or releases of pollutants, contaminants, petroleum or petroleum products, chemicals or industrial, toxic or hazardous substances or wastes into the environment, including, without limitation, ambient air, surface water, ground water or land, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of pollutants, contaminants, petroleum or petroleum products, chemicals or industrial, toxic or hazardous substances or wastes or the cleanup or other remediation thereof.

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended.

"*Exchange File Material*" means the Registration Statements, as amended at the times they were declared effective under the Exchange Act, the related Information Statements or any amendment or supplement thereto, the related letter of transmittal, any related stockholder communication, any other exhibits to any of the foregoing and any amendment or supplement thereto, in each case including all information incorporated by reference therein.

"*GAAP*" means United States generally accepted accounting principles and practices, as in effect on the date of this Agreement, as promulgated by the Financial Accounting Standards Board and its predecessors.

"*Governmental Authority*" means any government or any agency, bureau, board, commission, court, department, official, political subdivision, tribunal or other instrumentality of any government, whether federal, state or local, domestic or foreign.

"*Group*" means (i) with respect to Tenneco, the Energy Group, (ii) with respect to Industrial Company, the Industrial Group, and (iii) with respect to Shipbuilding Company, the Shipbuilding Group.

"*Indemnifiable Losses*" means, with respect to any Person, any and all losses, liabilities, penalties, claims, damages, demands, costs and expenses (including, without limitation, reasonable attorneys' fees, investigation expenses and any and all other out-of-pocket expenses, but excluding any punitive or consequential damages) or other Liabilities whatsoever that are assessed, imposed, awarded against, incurred or accrued by such Person either (a) in investigating, preparing for, defending against or otherwise arising out of or in connection with any Actions, any potential or threatened Actions or any Third Party

Claims for which such Person would be entitled to indemnification under Article VII hereof, or (b) in respect of any other event, occurrence or matter for which such Person would be entitled to indemnification under Article VII hereof, in each case whether accrued or incurred on, before or after the date of this Agreement.

"Indemnifying Party" has the meaning ascribed to such term in Section 7.04(a) hereof.

"Indemnitee" has the meaning ascribed to such term in Section 7.04(a) hereof.

"Industrial Assets" means, collectively, all of the following rights and assets that are owned by Tenneco or any of its Subsidiaries as of the close of business on the Distribution Date:

- (i) the capital stock of the Industrial Subsidiaries;
- (ii) all of the assets included on the Industrial Business Pro Forma Balance Sheet that are owned by Tenneco or any of its Subsidiaries as of the close of business on the Distribution Date;
- (iii) all of the assets and rights expressly allocated to Industrial Company or any of the Industrial Subsidiaries under this Agreement or any of the Ancillary Agreements; and
- (iv) any other asset acquired by Tenneco or any of its Subsidiaries from the date of the Industrial Business Pro Forma Balance Sheet to the close of business on the Distribution Date that is owned by Tenneco or any of its Subsidiaries as of the close of business on the Distribution Date and that is of a type or nature that would have resulted in such asset being included as an asset on the Industrial Business Pro Forma Balance Sheet had it been acquired on or prior to the date of the Industrial Business Pro Forma Balance Sheet, determined on a basis consistent with the determination of the assets included on the Industrial Business Pro Forma Balance Sheet.

"Industrial Business" means the businesses that, after giving effect to the Corporate Restructuring Transactions, are conducted by:

- (i) the Industrial Company, the Industrial Subsidiaries or any of the other members of the Industrial Group; and
- (ii) any business entity acquired or established by or for Tenneco, Industrial Company or any of the Industrial Subsidiaries between the date of this Agreement and the close of business on the Distribution Date that is engaged in, or intends to engage in, any business that is of a type or nature that would have resulted in such business being included either as a Subsidiary or an asset of Industrial Company on the Industrial Business Pro Forma Balance Sheet had it been acquired or established on or prior to the date of the Industrial Business Pro Forma Balance Sheet, determined on a basis consistent with the determination of the Subsidiaries and assets included on the Industrial Business Pro Forma Balance Sheet.

"Industrial Business Pro Forma Balance Sheet" means the Pro Forma Consolidated Balance Sheet for Industrial Company and the Industrial Subsidiaries as of June 30, 1996 attached hereto as Exhibit F.

"Industrial Common Shares" means the shares of Industrial Common Stock owned by Tenneco after giving effect to the stock dividend provided for in Section 2.02(a) hereof.

"Industrial Common Stock" has the meaning ascribed to such term in the recitals to this Agreement.

"Industrial Company" means New Tenneco Inc., a Delaware corporation.

"Industrial Distribution" means the distribution on the Distribution Date as a dividend to holders of record of shares of Tenneco Common Stock as of the Distribution Record Date of all of the outstanding Industrial Common Shares owned by Tenneco on the basis provided in Section 3.02 hereof.

"Industrial Group" means Industrial Company, the Industrial Subsidiaries and the corporations, partnerships, joint ventures, investments and other entities that represent equity investments of any of Industrial Company or any of the Industrial Subsidiaries following the consummation of the Corporate Restructuring Transactions and the Distributions.

"Industrial Indemnitees" means:

- (i) Industrial Company and each Affiliate thereof after giving effect to the Corporate Restructuring Transactions and the Distributions; and

(ii) each of the respective past, present and future directors, officers, employees and agents of any of the entities described in the immediately preceding clause (i) and each of the heirs, executors, successors and assigns of any of such directors, officers, employees and agents.

"Industrial Information Statement" means the information statement or registration statement relating to Industrial Company and the transactions contemplated hereby to be distributed to holders of Tenneco Common Stock pursuant to the terms of this Agreement.

"Industrial Liabilities" means, collectively, all of the Liabilities of Industrial Company, the Industrial Subsidiaries and each of the other members of the Industrial Group after giving effect to the Corporate Restructuring Transactions, the Distributions and the transactions contemplated under the Debt and Cash Allocation Agreement, including, without limitation:

(i) all of the Liabilities included on the Industrial Business Pro Forma Balance Sheet which remain outstanding as of the close of business on the Distribution Date;

(ii) all Liabilities (other than Energy Exchange Liabilities) which are incurred or which otherwise accrue or are accrued at any time on, prior to or after the date of the Industrial Business Pro Forma Balance Sheet and which arise or arose out of, or in connection with (A) the Industrial Assets, the Industrial Business or the Prior Industrial Businesses, determined on a basis consistent with the determination of Liabilities of Industrial Company on the Industrial Business Pro Forma Balance Sheet, including Information Statement Liabilities which arise or arose out of or in connection with, the Industrial Information Statement or which arise or arose out of or in connection with information or data in the Joint Proxy Statement or the Debt Realignment Documents concerning the Industrial Business (except to the extent such Liabilities constitute Shipbuilding Securities Liabilities or are otherwise based on any of (i) the actions or inactions of Shipbuilding Company, any other member of the Shipbuilding Group, or any director, officer or employee of the Shipbuilding Company or any other member of the Shipbuilding Group or any underwriter or investment banking firm of any member of the Shipbuilding Group (or any of their directors, officers, employees, advisors or representatives) (collectively, the "Shipbuilding Parties," or individually, a "Shipbuilding Party"), or (ii) the information or data provided in writing by any Shipbuilding Party expressly for inclusion in the Industrial Information Statement), or (B) the Shipbuilding Information Statement to the extent such Information Statement Liabilities are based on information or data concerning directly and solely the Industrial Company or the Industrial Business that is provided in writing by Industrial Company (or any other member of its Group or any Affiliate thereof after giving effect to the Distributions) expressly for inclusion in the Shipbuilding Information Statement;

(iii) all of the Liabilities of Industrial Company, the Industrial Subsidiaries or any of the other members of the Industrial Group under, or to be retained or assumed by Industrial Company, any Industrial Subsidiary or any of the other members of the Industrial Group pursuant to this Agreement or any of the Ancillary Agreements; and

(iv) all of the Liabilities of the parties hereto or their respective Subsidiaries (whenever arising whether prior to, at or following the Distribution Date) arising out of or in connection with or otherwise relating to the management or conduct before or after the Distribution Date of the Industrial Business.

"Industrial Records" has the meaning ascribed to such term in Section 6.01(a) hereof.

"Industrial Registration Statement" means the Registration Statement on Form 10 to be filed with the Commission pursuant to the requirements of Section 12 of the Exchange Act and the rules and regulations thereunder in order to register the Industrial Common Stock under Section 12(b) of the Exchange Act.

"Information Statement Liabilities" has the meaning ascribed to such term in clause (v) of the definitions herein of Energy Liabilities.

"Information Statements" means the Industrial Information Statement and the Shipbuilding Information Statement.

"Industrial Subsidiaries" means the Subsidiaries listed on Exhibit G hereto.

"Insurance Agreement" means the Insurance Agreement by and among Tenneco, Industrial Company and Shipbuilding Company, which agreement shall be entered into on or prior to the Distribution Date in the form attached hereto as Exhibit H except for such changes or modifications thereto that do not, individually or in the aggregate, adversely affect the Energy Business other than to a *de minimis* extent.

"Insurance Proceeds" means, with respect to any insured party, those monies, net of any applicable premium adjustment, retrospectively-rated premium, deductible, retention, or cost of reserve paid or held by or for the benefit of such insured, which are either:

- (i) received by an insured from an insurance carrier; or
- (ii) paid by an insurance carrier on behalf of an insured.

"Joint Proxy Statement" has the meaning ascribed to such term in the Merger Agreement.

"Law" means all laws, statutes and ordinances and all regulations, rules and other pronouncements of Governmental Authorities having the effect of law of the United States, any foreign country, or any domestic or foreign state, province, commonwealth, city, country, municipality, territory, protectorate, possession or similar instrumentality, or any Governmental Authority thereof.

"Liabilities" means any and all debts, liabilities, obligations, responsibilities, response actions, losses, damages (whether compensatory, punitive or treble), fines, penalties and sanctions, absolute or contingent, matured or unmatured, liquidated or unliquidated, foreseen or unforeseen, joint, several or individual, asserted or unasserted, accrued or unaccrued, known or unknown, whenever arising, including, without limitation, those arising under or in connection with any Law (including any Environmental Law), Action, threatened Action, order or consent decree of any Governmental Authority or any award of any arbitration tribunal, and those arising under any contract, guarantee, commitment or undertaking, whether sought to be imposed by a Governmental Authority, private party, or party to this Agreement, whether based in contract, tort, implied or express warranty, strict liability, criminal or civil statute, or otherwise, and including any costs, expenses, interest, attorneys' fees, disbursements and expense of counsel, expert and consulting fees and costs related thereto or to the investigation or defense thereof.

"Merger" has the meaning ascribed to such term in the recitals to this Agreement.

"Merger Agreement" has the meaning ascribed to such term in the recitals to this Agreement.

"NYSE" means the New York Stock Exchange.

"Person" means any natural person, corporation, business trust, joint venture, association, company, partnership, limited liability company or other entity, or any government, or any agency or political subdivision thereof.

"Prior Industrial Businesses" means, collectively, all divisions, Subsidiaries, other business entities or investments of Tenneco (or one of its Subsidiaries) that, at any time prior to the date of the Industrial Business Pro Forma Balance Sheet, were included in the "automotive parts" or "packaging" segments for purposes of segment reporting in any of Tenneco's Annual Reports on Form 10-K, and were sold, transferred, otherwise disposed of or discontinued prior to such date.

"Prior Shipbuilding Businesses" means, collectively, all divisions, Subsidiaries, other business entities or investments of Tenneco (or one of its Subsidiaries) that, at any time prior to the date of the Shipbuilding Business Pro Forma Balance Sheet, were included in the "shipbuilding" segment for purposes of segment reporting in any of Tenneco's Annual Reports on Form 10-K, and were sold, transferred, otherwise disposed of or discontinued prior to such date.

"Privilege" has the meaning ascribed to such term in Section 6.07(a) hereof.

"Privileged Information" has the meaning ascribed to such term in Section 6.07(a) hereof.

"Registration Statements" means the Industrial Registration Statement and the Shipbuilding Registration Statement.

"Securities Act" means the Securities Act of 1933, as amended.

"Securities Liabilities" means any and all losses, liabilities, penalties, claims, damages, demands, costs or expenses or other Liabilities whatsoever that are assessed, imposed, awarded against, incurred or accrued by a Person arising out of or relating in whole or in part to any Action, any potential or threatened Action or any Third Party Claim (or potential or threatened Third Party Claim) by any Governmental Authority or any other Person that is based on any violations or alleged violations of the Securities Act, Exchange Act, any of the rules or regulations of the Commission promulgated under the Securities Act or Exchange Act, or any other securities or other similar Law.

"Shipbuilding Assets" means, collectively, all of the following rights and assets that are owned by Tenneco and or any of its Subsidiaries as of the close of business on the Distribution Date:

- (i) the capital stock of the Shipbuilding Subsidiaries;
- (ii) all of the assets included on the Shipbuilding Business Pro Forma Balance Sheet that are owned by Tenneco or any of its Subsidiaries as of the close of business on the Distribution Date;
- (iii) all of the assets and rights expressly allocated to Shipbuilding Company or any of the Shipbuilding Subsidiaries under this Agreement or any of the Ancillary Agreements; and
- (iv) any other asset acquired by Tenneco or any of its Subsidiaries from the date of the Shipbuilding Business Pro Forma Balance Sheet to the close of business on the Distribution Date that is owned by Tenneco or any of its Subsidiaries as of the close of business on the Distribution Date and that is of a nature or type that would have resulted in such asset being included as an asset on the Shipbuilding Business Pro Forma Balance Sheet had it been acquired on or prior to the date of the Shipbuilding Business Pro Forma Balance Sheet, determined on a basis consistent with the determination of the assets included on the Shipbuilding Business Pro Forma Balance Sheet.

"Shipbuilding Business" means the businesses that, after giving effect to the Corporate Restructuring Transactions, are conducted by:

- (i) the Shipbuilding Company, the Shipbuilding Subsidiaries or any of the other members of the Shipbuilding Group; and
- (ii) any business entity acquired or established by or for Tenneco, Shipbuilding Company or any of the Shipbuilding Subsidiaries between the date of this Agreement and the close of business on the Distribution Date that is engaged in, or intends to engage in, any business that is of a type or nature that would have resulted in such business being included either as a Subsidiary or an asset of Shipbuilding Company on the Shipbuilding Business Pro Forma Balance Sheet had it been acquired or established on or prior to the date of the Shipbuilding Business Pro Forma Balance Sheet, determined on a basis consistent with the determination of the Subsidiaries and assets included on the Shipbuilding Business Pro Forma Balance Sheet.

"Shipbuilding Business Pro Forma Balance Sheet" means the Pro Forma Consolidated Balance Sheet for Shipbuilding Company and the Shipbuilding Subsidiaries (prepared in accordance with GAAP) as of June 30, 1996 attached hereto as Exhibit I.

"Shipbuilding Common Shares" means the Shares of Shipbuilding Common Stock owned by Tenneco after giving effect to the stock dividend provided for in Section 2.02(b) hereof.

"Shipbuilding Common Stock" has the meaning ascribed to such term in the recitals to this Agreement.

"Shipbuilding Company" means Newport News Shipbuilding Inc. (formerly known as Tenneco InterAmerica Inc.), a Delaware corporation.

"Shipbuilding Distribution" means the distribution on the Distribution Date as a dividend to holders of record of shares of Tenneco Common Stock as of the Distribution Record Date, of all of the outstanding Shipbuilding Common Shares owned by Tenneco on the basis provided in Section 3.02 hereof.

"Shipbuilding Financing Materials" means any registration statement, private placement memorandum, offering circular, prospectus, information memorandum and/or any other document or filing (with the Commission or any Governmental Authority or the NYSE or other stock exchange) prepared by or on behalf of Shipbuilding Company (or its Affiliates) and distributed to prospective lenders or prospective purchasers of any debt or equity securities of the Shipbuilding Company (or any other member of the Shipbuilding Group) in connection with any of the transactions contemplated under this Agreement, the Merger Agreement or any of the Ancillary Agreements, including, without limitation, the Confidential Information Memorandum dated September 1996 relating to the Senior Credit Facility (as defined in the Shipbuilding Information Statement), the 144A Offering Memorandum relating to the Senior Subordinated Notes and Senior Notes (as such terms are defined in the Shipbuilding Information Statement), and the registration statement on Form S-1 to be filed by Shipbuilding Company after the Distribution Date to register the Senior Subordinated Notes and Senior Notes under the Securities Act and all related documents.

"Shipbuilding Group" means Shipbuilding Company, the Shipbuilding Subsidiaries and the corporations, partnerships, joint ventures, investments and other entities that represent equity investments of Shipbuilding Company or any of the Shipbuilding Subsidiaries following the consummation of the Corporate Restructuring Transactions and the Distributions.

"Shipbuilding Indemnities" means:

(i) Shipbuilding Company and each Affiliate thereof after giving effect to the Corporate Restructuring Transactions and the Distributions; and

(ii) each of the respective past, present and future directors, officers, employees and agents of any of the entities described in the immediately preceding clause (i) and each of the heirs, executors, successors and assigns of any of such directors, officers, employees and agents.

"Shipbuilding Information Statement" means the information statement or registration statement relating to Shipbuilding Company and the transactions contemplated hereby to be distributed to holders of Tenneco Common Stock pursuant to the terms of this Agreement.

"Shipbuilding Liabilities" means, collectively, all of the Liabilities of Shipbuilding Company, the Shipbuilding Subsidiaries and each of the other members of the Shipbuilding Group after giving effect to the Corporate Restructuring Transactions, the Distributions and the transactions contemplated by the Debt and Cash Allocation Agreement, including, without limitation:

(i) all of the Liabilities included on the Shipbuilding Business Pro Forma Balance Sheet that remain outstanding as of the close of business on the Distribution Date;

(ii) all other Liabilities that are incurred or which accrue or are accrued at any time on, prior to or after the date of the Shipbuilding Business Pro Forma Balance Sheet and that arise or arose out of, or in connection with, the Shipbuilding Assets, the Shipbuilding Business or the Prior Shipbuilding Businesses, determined on a basis consistent with the determination of Liabilities of Shipbuilding Company on the Shipbuilding Business Pro Forma Balance Sheet, including, without limitation,

Shipbuilding Securities Liabilities and Information Statement Liabilities to the extent such Information Statement Liabilities (A) arise or arose out of or in connection with the Shipbuilding Information Statement or information or data in the Joint Proxy statement or the Debt Realignment Documents concerning the Shipbuilding Business or (B) are based on information or data provided in writing by Shipbuilding Company (or any member of its Group or any Affiliate (after giving effect to the Distributions) thereof) expressly for inclusion in the Industrial Information Statement;

(iii) all of the Liabilities of Shipbuilding Company, the Shipbuilding Subsidiaries or any of the other members of the Shipbuilding Group under, or to be retained or assumed by Shipbuilding Company, any Shipbuilding Subsidiary or any of the other members of the Shipbuilding Group pursuant to, this Agreement or any of the Ancillary Agreements; and

(iv) all the Liabilities of the parties hereto or their respective Subsidiaries (whenever arising whether prior to, on or following the Distribution Date) arising out of or in connection with or otherwise relating to the management or conduct before or after the Distribution Date of the Shipbuilding Business.

"Shipbuilding Records" has the meaning ascribed to such term in Section 6.01(b) hereof.

"Shipbuilding Registration Statement" means the Registration Statement on Form 10 to be filed with the Commission pursuant to the requirements of Section 12 of the Exchange Act and the rules and regulations promulgated thereunder in order to register the Shipbuilding Common Stock under Section 12(b) of the Exchange Act.

"Shipbuilding Securities Liabilities" means any and all Securities Liabilities arising out of, or in connection with, or relating in whole or in part to any of the following: (i) the Shipbuilding Registration Statement; (ii) the Shipbuilding Information Statement (whether in the form as an Appendix to the Joint Proxy Statement or as the Information Statement included in the Shipbuilding Registration Statement); (iii) the Shipbuilding Financing Materials; (iv) any of the information, data (financial or otherwise) or disclosures in (or any alleged failure to set forth certain information, data or disclosures in) the Shipbuilding Registration Statement, Shipbuilding Information Statement (whether in the form as an Appendix to the Joint Proxy Statement or as the Information Statement included in the Shipbuilding Registration Statement) or Shipbuilding Financing Materials, irrespective of (A) who authored, prepared or provided such information, data or disclosures (or, as the case may be, the section or discussion in which certain information, data or disclosure is alleged to have been omitted), or (B) the form in which, or medium through which (e.g., verbally, in writing, etc.), such information, data, disclosures, discussion or section were provided; or (v) any of the information, data (financial or otherwise) or disclosures in (or any alleged failure to set forth certain information, data or disclosures in) the Joint Proxy Statement or the Debt Realignment Documents concerning any matter relating to the business, operations, management, financial results or potential risks of (or pending or threatened claims or investigations relating to) the Shipbuilding Business, Prior Shipbuilding Businesses, Shipbuilding Assets or Shipbuilding Liabilities, irrespective of (A) who authored, prepared or provided such information data or disclosures (or, as the case may be, the section or discussion in which certain information, data or disclosure is alleged to have been omitted), or (B) the form in which, or medium through which (e.g., verbally, in writing, etc.), such information, data, disclosure, section or discussion were provided.

"Shipbuilding Subsidiaries" means the Subsidiaries listed on Exhibit J hereto.

"Subsidiary" means, with respect to any Person:

(i) any corporation of which at least a majority in interest of the outstanding voting stock (having by the terms thereof voting power under ordinary circumstances to elect a majority of the directors of such corporation, irrespective of whether or not at the time stock of any other class or classes of such corporation shall have or might have voting power by reason of the happening of a contingency) is at

the time, directly or indirectly, owned or controlled by such Person or by such Person and one or more of its Subsidiaries; or

(ii) any non-corporate entity in which such Person or such Person and one or more Subsidiaries of such Person either (a) directly or indirectly, at the date of determination thereof, has at least majority ownership interest, or (b) at the date of determination is a general partner or an entity performing similar functions (e.g., manager of a Limited Liability Company or a trustee of a trust).

"Surviving Corporation" has the meaning ascribed to such term in the recitals to this Agreement.

"Tax" or **"Taxes"** means any income, gross income, gross receipts, profits, capital stock, franchise, withholding, payroll, social security, workers compensation, unemployment, disability, property, ad valorem, stamp, excise, occupation, services, sales, use, license, lease, transfer, import, export, value added, alternative minimum, estimated or other similar tax (including any fee, assessment or other charge in the nature of or in lieu of any tax) imposed by any governmental entity or political subdivision thereof, and any interest, penalties, additions to tax, or additional amounts in respect of the foregoing.

"Tax Sharing Agreement" means the Tax Sharing Agreement by and among Tenneco, Shipbuilding Company, Industrial Company and Acquiror, which agreement shall be entered into on or prior to the Distribution Date in the form attached hereto as Exhibit K, except for such changes or modifications thereto that do not, individually or in the aggregate, adversely affect the Energy Business other than to a *de minimis* extent.

"Tenneco" means Tenneco Inc., a Delaware corporation.

"Tenneco Common Stock" has the meaning ascribed to such term in the recitals to this Agreement.

"Tenneco Corporate Records" has the meaning ascribed to such term in Section 6.01(a) hereof.

"Tenneco Holders" means the holders of record of Tenneco Common Stock as of the Distribution Record Date.

"Tenneco Trademarks and Tradenames" means all trademarks, service marks, and tradenames containing "TENNECO", "TEN", or "TENN" or variations thereof, along with their respective applications and registrations wherever used or registered; provided, however, that the term shall not include the word "Tennessee" to the extent such word is used in the business and operations of Tennessee Gas Pipeline Company or otherwise in the Energy Business.

"Termination Date" means the date on which this Agreement is terminated pursuant to and in accordance with the provisions of Section 8.11 of this Agreement.

"Third Party Claim" has the meaning as defined in Section 7.05(a) hereof.

"TBS Services Agreement" means the Services Agreement by and among Industrial Company, Shipbuilding Company and Tenneco Business Services Inc., which agreement shall be entered into on or prior to the Distribution Date in substantially the form attached hereto as Exhibit L and which agreement Tenneco and the Energy Business will not become a party to and not be bound by without the consent of Acquiror, which Acquiror may withhold in its sole discretion.

"Transition Services Agreement" means the Transition Services Agreement by and between Tenneco and Tenneco Business Services Inc., which agreement shall be entered into on or prior to the Distribution Date in the form attached hereto as Exhibit M.

"Transition Trademark License" has the meaning ascribed to such term in Section 5.02 hereof.

SECTION 1.02. References. References to an "Exhibit" or to a "Schedule" are, unless otherwise specified, to one of the Exhibits or Schedules attached to this Agreement, and references to a "Section" are, unless otherwise specified, to one of the Sections of this Agreement.

ARTICLE II
PRE-DISTRIBUTION TRANSACTIONS;
CERTAIN COVENANTS

SECTION 2.01. *Corporate Restructuring Transactions.* On or prior to the Distribution Date (but in all events prior to the Distributions) and otherwise in accordance with the terms and provisions set forth in Exhibit B hereto, each of Tenneco, Industrial Company and Shipbuilding Company shall, and shall cause each of their respective Subsidiaries to, as applicable, take such action or actions as is necessary to cause, effect and consummate the Corporate Restructuring Transactions. Each of Tenneco, Shipbuilding Company and Industrial Company hereby agrees that any one or more of the Corporate Restructuring Transactions may be modified, supplemented or eliminated; provided such modification, supplement or elimination (a) is determined to be necessary or appropriate (i) to divide the existing businesses of Tenneco so that the automotive, packaging and business services businesses shall be owned, directly and indirectly, by Industrial Company and the shipbuilding business shall be owned, directly and indirectly, by Shipbuilding Company, or (ii) to obtain a ruling from the Internal Revenue Service as described in Section 7.1(g) of the Merger Agreement, and (b) does not, individually or in the aggregate, adversely affect the Energy Business (other than to a *de minimis* extent) or materially delay or prevent the consummation of the Merger.

SECTION 2.02. *Pre-Distribution Stock Dividends to Tenneco.* On or prior to the Distribution Date (but in all events prior to the Distributions):

(a) ***Industrial Company Stock Dividend.*** Industrial Company shall issue to Tenneco, as a stock dividend, the number of shares of Industrial Common Stock as is required to effect the Industrial Distribution, as certified by the Agent. In connection therewith, Tenneco shall deliver to Industrial Company for cancellation the share certificate (or certificates) currently held by it representing all Industrial Common Stock, and Industrial Company shall issue a new certificate (or certificates) to Tenneco representing the total number of Industrial Common Shares to be owned by Tenneco after giving effect to such stock dividend.

(b) ***Shipbuilding Company Stock Dividend.*** Shipbuilding Company shall issue to Tenneco, as a stock dividend, the number of shares of Shipbuilding Common Stock as is required to effect the Shipbuilding Distribution, as certified by the Agent. In connection therewith, Tenneco shall deliver to Shipbuilding Company for cancellation the share certificate (or certificates) currently held by it representing all Shipbuilding Common Stock, and Shipbuilding Company shall issue a new certificate (or certificates) representing the total number of Shipbuilding Common Shares to be owned by Tenneco after giving effect to such stock dividend.

SECTION 2.03. *Charters and Bylaws.*

(a) ***Certificate of Incorporation and Bylaws of Industrial Company.*** On or prior to the Distribution Date (but in all events prior to the Distributions), Tenneco and Industrial Company shall each take all necessary actions so that, as of the Distribution Date, the Restated Certificate of Incorporation and Bylaws of Industrial Company will be substantially in the forms set forth in Exhibits N and O, respectively.

(b) ***Certificate of Incorporation and Bylaws of Shipbuilding Company.*** On or prior to the Distribution Date (but in all events prior to the Distributions), Tenneco and Shipbuilding Company shall each take all necessary actions so that, as of the Distribution Date, the Restated Certificate of Incorporation and Bylaws of Shipbuilding Company will be substantially in the forms set forth in Exhibits N and O, respectively.

SECTION 2.04. *Election of Directors of Industrial Company and Shipbuilding Company.* On or prior to the Distribution Date, Tenneco, as the sole stockholder of each of Industrial Company and Shipbuilding Company, shall take all necessary action so that as of the Distribution Date the directors of Industrial Company and of Shipbuilding Company will be as set forth in the Industrial Information Statement and the Shipbuilding Information Statement, respectively.

SECTION 2.05. *Transfer and Assignment of Certain Licenses and Permits.*

(a) *Licenses and Permits Relating to the Industrial Business.* On or prior to the Distribution Date, or as soon as reasonably practicable thereafter, each of Tenneco and Shipbuilding Company shall (and, if applicable, shall cause any other Person over which it has legal or effective direct or indirect control to), severally but not jointly, duly and validly transfer or cause to be duly and validly transferred to the appropriate member of the Industrial Group (as directed by Industrial Company) all transferrable licenses, permits and authorizations issued by any Governmental Authority that relate to the Industrial Business but which are held in the name of any member of the Energy Group or the Shipbuilding Group, or any of their respective employees, officers, directors, stockholders or agents.

(b) *Licenses and Permits Relating to the Shipbuilding Business.* On or prior to the Distribution Date, or as soon as reasonably practicable thereafter, each of Tenneco and Industrial Company shall (and, if applicable, shall cause any other Person over which it has legal or effective direct or indirect control to), severally but not jointly, duly and validly transfer or cause to be duly and validly transferred to the appropriate member of the Shipbuilding Group (as directed by Shipbuilding Company) all transferrable licenses, permits and authorizations issued by any Governmental Authority that relate to the Shipbuilding Business but which are held in the name of any member of the Energy Group or the Industrial Group, or any of their respective employees, officers, directors, stockholders or agents.

(c) *Licenses and Permits Relating to the Energy Business.* On or prior to the Distribution Date, or as soon as reasonably practicable thereafter, each of Industrial Company and Shipbuilding Company shall (and, if applicable, shall cause any other Person over which it has legal or effective direct or indirect control to), severally but not jointly, duly and validly transfer or cause to be duly and validly transferred to the appropriate member of the Energy Group (as directed by Tenneco) all transferrable licenses, permits and authorizations issued by any Governmental Authority that relate to the Energy Business but which are held in the name of any member of the Industrial Group or the Shipbuilding Group, or any of their respective employees, officers, directors, stockholders or agents.

SECTION 2.06. *Transfer and Assignment of Certain Agreements.*

(a) *Transfer and Assignment of Energy Business Agreements.* On or prior to the Distribution Date, or as soon as reasonably practicable thereafter, and subject to the limitations set forth in this Section 2.06, each of Industrial Company and Shipbuilding Company shall (and, if applicable, shall cause any of the other members of its Group over which it has legal or effective direct or indirect control to), severally but not jointly, assign, transfer and convey to Tenneco (or such other member of the Energy Group as Tenneco shall direct) all of its (or such other member of its Group's) right, title and interest in and to any and all agreements that relate exclusively to the Energy Business or any member of the Energy Group.

(b) *Transfer and Assignment of Industrial Business Agreements.* On or prior to the Distribution Date, or as soon as reasonably practicable thereafter, and subject to the limitations set forth in this Section 2.06, each of Tenneco and Shipbuilding Company shall (and, if applicable, shall cause any of the other members of its Group over which it has legal or effective direct or indirect control to), severally but not jointly, assign, transfer and convey to Industrial Company (or such other member of the Industrial Group as Industrial Company shall direct) all of its (or such other member of its Group's) right, title and interest in and to any and all agreements that relate exclusively to the Industrial Business or any member of the Industrial Group.

(c) *Transfer and Assignment of Shipbuilding Business Agreements.* On or prior to the Distribution Date, or as soon as reasonably practicable thereafter, and subject to the limitations set forth in this Section 2.06, each of Tenneco and Industrial Company shall (and, if applicable, shall cause any of the other members of its Group over which it has legal or effective direct or indirect control to), severally but not jointly, assign, transfer and convey to Shipbuilding Company (or such other member of the Shipbuilding Group as Shipbuilding Company shall direct) all of its (or such other member of its Group's) right, title and interest in and to any and all agreements that relate exclusively to the Shipbuilding Business or any member of the Shipbuilding Group.

(d) *Joint Agreements.* Subject to the provisions of Section 2.06(f) below, any agreement to which any party hereto (or any other member of such party's Group) is a party that inures to the benefit of more than one of the Energy Business, the Industrial Business and the Shipbuilding Business shall be assigned in part, at the expense and risk of the assignee, on or prior to the Distribution Date or as soon as reasonably practicable thereafter, so that each party (or such other member of such party's Group) shall be entitled to the rights and benefits inuring to its business under such agreement.

(e) *Obligations of Assignees.* The assignee of any agreement assigned, in whole or in part, hereunder (an "Assignee") shall, as a condition to such assignment, assume and agree to pay, perform, and fully discharge all obligations of the assignor under such agreement (whether such obligations arose or were incurred prior to, on or subsequent to the Distribution Date and irrespective of whether such obligations have been asserted as of the Distribution Date) or, in the case of a partial assignment under Section 2.06(d) above, such Assignee's related portion of such obligations as determined in accordance with the terms of the relevant agreement, where determinable on the face thereof, and otherwise as determined in accordance with the practice of the parties prior to the Distributions. Furthermore, the Assignee shall use its commercially reasonable efforts to cause the assignor of such agreement to be released from its obligations under the assigned agreements.

(f) *No Assignment of Certain Agreements.* Notwithstanding anything in this Agreement to the contrary, this Agreement shall not constitute an agreement to assign any agreement, in whole or in part, or any rights thereunder if the agreement to assign or attempt to assign, without the consent of a third party, would constitute a breach thereof or in any way adversely affect the rights of the Assignee thereof until such consent is obtained. If an attempted assignment thereof would be ineffective or would adversely affect the rights of any party hereto so that the Assignee would not, in fact, receive all such rights, the parties hereto will cooperate with each other to effect any arrangement designed reasonably to provide for the Assignee the benefits of, and to permit the Assignee to assume liabilities under, any such agreement, subject to the remaining sentences of this Section 2.06(f). There are certain software license agreements held in the name of a member of the Industrial Group that presently inure to the benefit of the Energy Business, the Industrial Business and the Shipbuilding Business. Notwithstanding any other provision of this Agreement, each such license agreement shall continue to be held by that member of the Industrial Group without any obligation of any party to cause the assignment or inurement to the benefit of such license agreement, or to effect any arrangement to provide such benefit, to the Energy Business or the Shipbuilding Business, except where the license agreement expressly permits the benefits and obligations to be divided among the Businesses or as may be negotiated with the licensor by that member of the Industrial Group and such other parties and the Industrial Business shall use commercially reasonable efforts to do so.

SECTION 2.07. *Consents.* The parties hereto shall use their best efforts to obtain any third-party consents or approvals that are required to consummate the Corporate Restructuring Transactions, the Distributions and the other transactions contemplated herein (the "*Consents*").

SECTION 2.08. *Other Transactions.* On or prior to the Distribution Date (but in all events prior to the Distributions), each of Tenneco, Industrial Company and Shipbuilding Company shall have consummated those other transactions in connection with the Corporate Restructuring Transactions and the Distributions that are contemplated by the Information Statements and the ruling request submission by Tenneco to the Internal Revenue Service dated June 27, 1996 (as subsequently supplemented), and not specifically referred to in Sections 2.01 through 2.07 above, subject, however, to the limitations set forth in subparagraph (b) of Section 2.01 above.

SECTION 2.09. *Election of Officers.* On or prior to the Distribution Date, each of Tenneco, Industrial Company and Shipbuilding Company shall, as applicable, take all actions necessary and desirable so that as of the Distribution Date the officers of Industrial Company and of Shipbuilding Company will be as set forth in the Industrial Information Statement and the Shipbuilding Information Statement, respectively.

SECTION 2.10. Registration Statements. Each of Tenneco, Industrial Company and Shipbuilding Company shall prepare, and shall file with the Commission, the Registration Statements in accordance with the terms of this Section 2.10.

(a) *Preparation and Filing of Industrial Registration Statement.* Tenneco, Industrial Company and Shipbuilding Company shall prepare or cause to be prepared, and Industrial Company shall file or cause to be filed with the Commission, the Industrial Registration Statement. The Industrial Registration Statement shall include or incorporate by reference the Industrial Information Statement setting forth appropriate disclosure concerning Tenneco, Industrial Company, Shipbuilding Company, the Distributions and such other matters as may be required to be disclosed therein by the provisions of the Exchange Act and the rules and regulations promulgated thereunder. Tenneco and Industrial Company shall take all such actions as may be reasonably necessary or appropriate in order to cause the Industrial Registration Statement to become effective by order of the Commission pursuant to the Exchange Act.

(b) *Preparation and Filing of Shipbuilding Registration Statement.* Tenneco, Industrial Company and Shipbuilding Company shall prepare or cause to be prepared, and Shipbuilding Company shall file or cause to be filed with the Commission, the Shipbuilding Registration Statement. The Shipbuilding Registration Statement shall include or incorporate by reference the Shipbuilding Information Statement setting forth appropriate disclosure concerning Tenneco, Shipbuilding Company, Industrial Company, the Distributions and such other matters as may be required to be disclosed therein by the provisions of the Exchange Act and the rules and regulations promulgated thereunder. Tenneco and Shipbuilding Company shall take all such actions as may be reasonably necessary or appropriate in order to cause the Shipbuilding Registration Statement to become effective by order of the Commission pursuant to the Exchange Act.

SECTION 2.11. State Securities Laws. Prior to the Distribution Date, Tenneco, Industrial Company and Shipbuilding Company shall take all such action as may be necessary or appropriate under the securities or blue sky laws of states or other political subdivisions of the United States in order to effect the Distributions.

SECTION 2.12. Listing Application. Prior to the Distribution Date, Tenneco, Industrial Company and Shipbuilding Company shall prepare and file with the NYSE listing applications and related documents and shall take all such other actions with respect thereto as shall be necessary or desirable in order to cause the NYSE to list on or prior to the Distribution Date, subject to official notice of issuance, the Industrial Common Shares and the Shipbuilding Common Shares.

SECTION 2.13. Certain Financial and Other Arrangements.

(a) *Settlement of Intercompany Accounts between Industrial Group and Energy Group.* All intercompany receivables, payables and loans (other than receivables, payables and loans otherwise specifically provided for in any of the Ancillary Agreements or hereunder), including, without limitation, in respect of any cash balances, any cash balances representing deposited checks or drafts for which only a provisional credit has been allowed or any cash held in any centralized cash management system, between any member of the Industrial Group, on the one hand, and any member of the Energy Group, on the other hand, shall, as of the close of business on the Distribution Date, be settled, capitalized or converted into ordinary trade accounts, in each case as may be agreed in writing prior to the Distribution Date by duly authorized representatives of Tenneco, Industrial Company and the Acquiror.

(b) *Settlement of Intercompany Accounts between Shipbuilding Group and Energy Group.* All intercompany receivables, payables and loans (other than receivables, payables and loans otherwise specifically provided for in any of the Ancillary Agreements or hereunder), including, without limitation, in respect of any cash balances, any cash balances representing deposited checks or drafts for which only a provisional credit has been allowed or any cash held in any centralized cash management system, between any member of the Shipbuilding Group, on the one hand, and any member of the Energy Group, on the other hand, shall, as of the close of business on the Distribution Date, be settled, capitalized or converted into ordinary trade accounts, in each case as may be agreed in writing prior to the Distribution Date by duly authorized representatives of Tenneco, Shipbuilding Company and the Acquiror.

(c) *Settlement of Intercompany Accounts between Industrial Group and Shipbuilding Group.* All intercompany receivables, payables and loans (other than receivables, payables and loans otherwise specifically provided for in any of the Ancillary Agreements or hereunder), including, without limitation, in respect of any cash balances, any cash balances representing deposited checks or drafts for which only a provisional credit has been allowed or any cash held in any centralized cash management system, between any member of the Industrial Group, on the one hand, and any member of the Shipbuilding Group, on the other hand, shall, as of the close of business on the Distribution Date, be settled, capitalized or converted into ordinary trade accounts, in each case as may be agreed in writing prior to the Distribution Date by duly authorized representatives of Industrial Company and Shipbuilding Company.

(d) *Operations in Ordinary Course.* Except as otherwise provided in this Agreement, the Merger Agreement or any Ancillary Agreement, during the period from the date of this Agreement through the Distribution Date, each of Tenneco, Industrial Company and Shipbuilding Company shall, and shall cause any entity that is a Subsidiary of such party at any time during such period to, conduct its business in a manner substantially consistent with current and past operating practices and in the ordinary course, including, without limitation, with respect to the payment and administration of accounts payable and the collection and administration of accounts receivable, the purchase of capital assets and equipment and the management of inventories.

SECTION 2.14. Director, Officer and Employee Resignations. Subject to the provisions of Section 2.04 and Section 2.09 above:

(a) *Resignations by Directors and Employees of the Energy Group.* Tenneco shall cause all of its directors and all employees of the Energy Group to resign, effective as of the close of business on the Distribution Date, from all boards of directors or similar governing bodies of each member of the Industrial Group or the Shipbuilding Group on which they serve, and from all positions as officers or employees of any member of the Industrial Group or the Shipbuilding Group, except as otherwise set forth in the Information Statements or mutually agreed to in writing on or prior to the Distribution Date by Tenneco, on the one hand, and, as applicable, Industrial Company and/or Shipbuilding Company, on the other hand.

(b) *Resignations by Directors and Employees of the Industrial Group.* Industrial Company shall cause all of its directors and all employees of the Industrial Group to resign, effective as of the close of business on the Distribution Date, from all boards of directors or similar governing bodies of each member of the Energy Group or the Shipbuilding Group on which they serve, and from all positions as officers or employees of any member of the Energy Group or the Shipbuilding Group, except as otherwise set forth in the Information Statements or mutually agreed to in writing on or prior to the Distribution Date by Industrial Company, on the one hand, and, as applicable, Tenneco and/or Shipbuilding Company, on the other hand.

(c) *Resignations by Directors and Employees of the Shipbuilding Group.* Shipbuilding Company shall cause all of its directors and all employees of the Shipbuilding Group to resign, effective as of the close of business on the Distribution Date, from all boards of directors or similar governing bodies of each member of the Energy Group or the Industrial Group on which they serve, and from all positions as officers or employees of any member of the Energy Group or the Industrial Group, except as otherwise set forth in the Information Statements or mutually agreed to in writing on or prior to the Distribution Date by Shipbuilding Company, on the one hand, and, as applicable, Industrial Company and/or Tenneco, on the other hand.

SECTION 2.15. Transfers Not Effected Prior to the Distributions; Transfers Deemed Effective as of the Distribution Date. To the extent that any transfers contemplated by this Article II shall not have been consummated on or prior to the Distribution Date, the parties hereto shall cooperate (and shall cause each of their respective Affiliates and each member of their respective Groups over which they have legal or effective direct or indirect control to cooperate) to effect such transfers as promptly following the Distribution Date as shall be practicable. Nothing herein shall be deemed to require the transfer of any assets or the assumption of any Liabilities which by their terms or operation of Law cannot be transferred or assumed; *provided, however*, that the parties hereto shall cooperate (and shall cause each of their respective Affiliates and each member of their respective Groups over which they have legal or effective direct or indirect control to cooperate) to seek to

obtain any necessary consents or approvals for the transfer of all assets and Liabilities contemplated to be transferred pursuant to this Article II. In the event that any such transfer of assets or Liabilities has not been consummated, from and after the Distribution Date the party retaining such asset or Liability (or, as applicable, such other member or members of such party's Group) shall hold such asset in trust for the use and benefit of the party entitled thereto (at the expense of the party entitled thereto) or retain such Liability for the account of the party by whom such Liability is to be assumed pursuant hereto, as the case may be, and take such other action as may be reasonably requested by the party to whom such asset is to be transferred, or by whom such Liability is to be assumed, as the case may be, in order to place such party, insofar as is reasonably possible, in the same position as would have existed had such asset or Liability been transferred or assumed as contemplated hereby. As and when any such asset or Liability becomes transferable or assumable, such transfer shall be effected forthwith. As of the Distribution Date, each party hereto (or, if applicable, such other members of such party's Group) shall be deemed to have acquired (or, as applicable, retained) complete and sole beneficial ownership over all of the assets, together with all rights, powers and privileges incident thereto, and shall be deemed to have assumed in accordance with the terms of this Agreement all of the Liabilities, and all duties, obligations and responsibilities incident thereto, which such party (or any other member of such party's Group) is entitled to acquire or required to assume pursuant to the terms of this Agreement.

SECTION 2.16. Ancillary Agreements. Prior to the Distribution Date, each of Tenneco, Industrial Company and Shipbuilding Company shall enter into, and/or where applicable shall cause such other members of their respective Groups to enter into, (a) the Ancillary Agreements and (b) any other agreements in respect of the Corporate Restructuring Transactions and the Distributions as are reasonably necessary or appropriate in connection with the transactions contemplated hereby and thereby so long as such agreements do not materially delay or prevent consummation of the Merger or adversely affect the Energy Business other than to a *de minimis* extent.

ARTICLE III THE DISTRIBUTIONS

SECTION 3.01. Tenneco Action Prior to the Distributions. Subject to the terms and conditions set forth herein, Tenneco shall take, or cause to be taken, the following acts or actions in connection with, and to otherwise effect in accordance with the terms of this Agreement, the Distributions.

(a) **Declaration of Distributions and Establishment of Distribution Date.** The Board of Directors of Tenneco shall, in its sole discretion and subject to and in accordance with the applicable rules of the NYSE and provisions of the DGCL, declare the Distributions and establish the Distribution Record Date, the Distribution Date, the date on which Industrial Common Shares, Shipbuilding Common Shares and any cash in lieu of fractional shares shall be mailed to the Tenneco Holders and all appropriate procedures in connection with the Distributions to the extent not provided for herein; *provided, however*, that no such action shall create any obligation on the part of Tenneco to effect the Distributions or in any way limit Tenneco's power of termination as set forth in Section 8.11 hereof or alter the consequences of any such termination from those specified in such Section.

(b) **Notice to NYSE.** Tenneco shall, to the extent possible, give the NYSE not less than ten days advance notice of the Distribution Record Date in compliance with Rule 10b-17 under the Exchange Act.

(c) **Mailing of Industrial Information Statement.** Tenneco shall, as soon as practicable after the Industrial Registration Statement shall have been declared effective under the Exchange Act, cause the Industrial Information Statement to be mailed to the Tenneco Holders.

(d) **Mailing of Shipbuilding Information Statement.** Tenneco shall, as soon as practicable after the Shipbuilding Registration Statement shall have been declared effective under the Exchange Act, cause the Shipbuilding Information Statement to be mailed to the Tenneco Holders.

SECTION 3.02. *The Distributions.*

(a) *Duties and Obligations of Tenneco.* Subject to the conditions contained herein, on the Distribution Date but effective immediately following the close of business on the Distribution Date Tenneco shall:

(i) deliver to the Agent the share certificates representing the Industrial Common Shares and Shipbuilding Common Shares issued to Tenneco by Industrial Company and Shipbuilding Company, respectively, pursuant to Section 2.02 hereof, endorsed by Tenneco in blank, for the benefit of the Tenneco Holders; and

(ii) instruct the Agent to distribute, as soon as practicable following consummation of the Distributions, to the Tenneco Holders the following:

(A) one share of Industrial Common Stock for every one share of Tenneco Common Stock;

(B) one share of Shipbuilding Common Stock for every five shares of Tenneco Common Stock; and

(C) cash, if applicable, in lieu of fractional shares obtained in the manner provided in Section 3.03 hereof.

(b) *Duties and Responsibilities of Industrial Company and Shipbuilding Company.* Industrial Subsidiary and Shipbuilding Subsidiary shall provide, or cause to be provided, to the Agent sufficient certificates representing Industrial Common Stock and Shipbuilding Common Stock, respectively, in such denominations as the Agent may request in order to effect the Distributions. All shares of Industrial Common Stock issued pursuant to the Industrial Distribution will be validly issued, fully paid and nonassessable and free of any preemptive (or similar) rights. All shares of Shipbuilding Common Stock issued pursuant to the Shipbuilding Distribution will be validly issued, fully paid and nonassessable and free of any preemptive (or similar) rights.

SECTION 3.03. *Fractional Shares.*

(a) *No Fractional Shares.* Notwithstanding anything herein to the contrary, no certificate or scrip evidencing a fractional share of Industrial Common Stock or Shipbuilding Common Stock shall be issued in connection with the Distributions, and any such fractional share interests to which a Tenneco Holder would otherwise be entitled will not entitle such Tenneco Holder to vote or to any rights of a stockholder of Industrial Company or Shipbuilding Company, as the case may be. In lieu of any such fractional shares, each Tenneco Holder who, but for the provisions of this Section 3.03, would be entitled to receive a fractional share interest of Industrial Common Stock or Shipbuilding Common Stock pursuant to the Distributions shall be paid cash, without any interest thereon, as hereinafter provided. Tenneco shall instruct the Agent to determine the number of whole shares and fractional shares of Industrial Common Stock and Shipbuilding Common Stock allocable to each Tenneco Holder, to aggregate all such fractional shares into whole shares, to sell the whole shares obtained thereby in the open market at the then prevailing prices on behalf of Tenneco Holders who otherwise would be entitled to receive fractional share interests and to distribute to each such Tenneco Holder his, her or its ratable share of the total proceeds of such sale, after making appropriate deductions of the amount required for federal income tax withholding purposes and after deducting any applicable transfer taxes. All brokers' fees and commissions incurred in connection with such sales shall be paid by Tenneco.

(b) *Unclaimed Stock or Cash.* Any Industrial Common Stock, Shipbuilding Common Stock or cash in lieu of fractional shares and dividends or distributions with respect to Industrial Common Stock or Shipbuilding Common Stock that remain unclaimed by any Tenneco Holder 180 days after the Distribution Date shall be returned to Tenneco and any such Tenneco Holders shall look only to Tenneco for the Industrial Common Stock, Shipbuilding Common Stock, cash, if any, in lieu of fractional share interests and any such dividends or distributions to which they are entitled, subject in each case to applicable escheat or other abandoned property laws.

(c) *Beneficial Owners.* Solely for purposes of computing fractional share interests pursuant to Section 3.03(a), the beneficial owner of shares of Tenneco Common Stock held of record in the name of a nominee will be treated as the holder of record of such shares.

ARTICLE IV CONDITIONS TO THE DISTRIBUTIONS

SECTION 4.01. *Conditions Precedent to the Distributions.* The obligation of Tenneco to cause the Distributions to be consummated shall be subject, at the option of Tenneco, to the fulfillment or waiver, on or prior to the Termination Date, of each of the following conditions.

(a) *Tax Sharing Agreement.* Tenneco, Industrial Company, Shipbuilding Company and Acquiror shall have executed and delivered the Tax Sharing Agreement and such agreement shall be in full force and effect.

(b) *Benefits Agreement.* Tenneco, Industrial Company and Shipbuilding Company shall have executed and delivered the Benefits Agreement and such agreement shall be in full force and effect.

(c) *Transition Services Agreement.* Tenneco and Tenneco Business Services Inc. shall have executed and delivered the Transition Services Agreement and such agreement shall be in full force and effect.

(d) *Insurance Agreement.* Tenneco, Industrial Company and Shipbuilding Company shall have executed and delivered the Insurance Agreement and such agreement shall be in full force and effect.

(e) *Debt and Cash Allocation Agreement.* Tenneco, Industrial Company and Shipbuilding Company shall have executed and delivered the Debt and Cash Allocation Agreement and such agreement shall be in full force and effect.

(f) *Effective Date of Registration Statement.* Each of the Registration Statements shall have been declared effective by order of the Commission and no stop order shall have been entered, and no proceeding for that purpose shall have been initiated or threatened by the Commission with respect thereto.

(g) *NYSE Listing.* The Industrial Common Shares and the Shipbuilding Common Shares shall have been approved for listing on the NYSE, subject to official notice of issuance.

(h) *Tax Ruling.* Tenneco shall have received rulings from the Internal Revenue Service reasonably acceptable to Tenneco and Acquiror, which rulings shall be in full force and effect as of the Distribution Date, to the effect that:

- (i) The Industrial Distribution as contemplated hereunder will be tax-free for federal income tax purposes to Tenneco under Section 355(c)(1) of the Code and to the stockholders of Tenneco under Section 355(a) of the Code;
- (ii) The Shipbuilding Distribution as contemplated hereunder will be tax-free for federal income tax purposes to Tenneco under Section 355(c)(1) of the Code and to the stockholders of Tenneco under Section 355(a) of the Code; and
- (iii) The following distributions will be tax free to the respective transferor corporations under Section 355(c)(1) of the Code and to the respective stockholders of the transferor corporations under Section 355(a) of the Code: (A) the distribution by the Shipbuilding Company of the capital stock of Tenneco Packaging Inc. to Tenneco Corporation contemplated under the Corporate Restructuring Transactions; (B) the distribution by Tenneco Corporation of the capital stock of the Shipbuilding Company and the Industrial Company to Tennessee Gas Pipeline Company as contemplated under the Corporate Restructuring Transactions; and (C) the distribution by Tennessee Gas Pipeline Company of the capital stock of the Shipbuilding Company and the Industrial Company to Tenneco Inc. as contemplated under the Corporate Restructuring Transactions.

(i) *Pre-Distribution Transactions.* Each of the transactions and other matters contemplated by Article II and Section 3.01 hereof (including, without limitation, each of the distributions, transfers, conveyances, contributions, assignments or other transactions included in, or otherwise necessary to consummate, the Corporate Restructuring Transactions) shall have been fully effected, consummated and accomplished.

(j) *Covenants.* The covenants contained in Article V of this Agreement that are required to be performed on or before the Distribution Date shall have been fully performed.

(k) *No Prohibitions.* Consummation of the transactions contemplated hereby shall not be prohibited by Law and no Governmental Authority of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any statute, rule, regulation, executive order, decree, injunction or other order (whether temporary, preliminary or permanent) which is in effect and which materially restricts, prevents or prohibits consummation of the Distributions, the Merger or any transaction contemplated by this Agreement or the Merger Agreement, it being understood that the parties hereto hereby agree to use their reasonable best efforts to cause any such decree, judgment, injunction or other order to be vacated or lifted as promptly as possible.

(l) *Consents.* Tenneco, Industrial Company, Shipbuilding Company and the other members of their respective Groups shall have obtained all Consents the failure of which to obtain would, in the determination of the Board of Directors of Tenneco, have a material adverse effect on the Energy Group, the Industrial Group or the Shipbuilding Group, each taken as a whole, and such Consents shall be in full force and effect.

(m) *Stockholder Approval.* The Distributions shall have been approved by the requisite vote of the holders of the outstanding Tenneco Common Stock and the holders of the outstanding \$7.40 Cumulative Preferred Stock of Tenneco, voting together as a class, by the requisite vote of the holders of the outstanding \$4.50 Cumulative Preferred Stock of Tenneco and the holders of the outstanding \$7.40 Cumulative Preferred Stock of Tenneco, voting together as a class, and by any requisite vote of the holders of the outstanding New Preferred Stock (as defined in the Merger Agreement), voting separately as a class, in accordance with the DGCL and the provisions of Tenneco's Certificate of Incorporation.

(n) *HSR Act.* The waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, applicable to the transactions contemplated under the Merger Agreement shall have expired or been terminated.

(o) *Debt Realignment.* Each of the transactions and other matters contemplated under the Debt Realignment (as defined under the Merger Agreement) shall have been fully effected, consummated and accomplished.

SECTION 4.02. *No Constraint.* Notwithstanding the provisions of Section 4.01 above (but subject to Tenneco's obligations under the Merger Agreement), the fulfillment or waiver of any or all of the conditions precedent to the Distributions set forth therein shall not:

- (i) create any obligation on the part of Tenneco or any other party hereto to effect the Distributions;
- (ii) in any way limit Tenneco's right and power under Section 8.11 hereof to terminate this Agreement and the process leading to the Distributions and to abandon the Distributions; or
- (iii) alter the consequences of any such termination under Section 8.11 hereof from those specified in such Section.

SECTION 4.03. *Deferral of Distribution Date.* If the Distribution Date shall have been established by the Board of Directors of Tenneco but all the conditions precedent to the Distributions set forth in this Agreement have not theretofore been fulfilled or waived, or Tenneco does not reasonably anticipate that they will be fulfilled or waived, on or prior to the date established as the Distribution Date, Tenneco may, by resolution of its Board of Directors (or a committee thereof, so authorized), defer the Distribution Date to a later date.

SECTION 4.04. *Public Notice of Deferred Distribution Date.* If the Board of Directors (or a committee thereof, so authorized) of Tenneco shall defer the Distribution Date in accordance with Section 4.03 above and public announcement of the prior Distribution Date has theretofore been made, Tenneco shall promptly thereafter

issue, in accordance with the advice of legal counsel, a public announcement with respect to such deferment and shall, with the advice of legal counsel, take such other actions as may be deemed necessary or desirable with respect to the dissemination of such information.

ARTICLE V COVENANTS

SECTION 5.01. *Further Assurances.* Each of Tenneco, Industrial Company and Shipbuilding Company shall use all reasonable efforts to:

(a) take or cause to be taken all actions, and to do or cause to be done all things reasonably necessary, proper or advisable under applicable Law and agreements or otherwise to consummate and make effective the transactions contemplated hereby, including without limitation using commercially reasonable efforts to obtain any consents and approvals from, enter into any amendatory agreements with and make any applications, registrations or filings with, any third Person or any Governmental Authority necessary or desirable in order to consummate the transactions contemplated hereby or to carry out the purposes of this Agreement; and

(b) execute and deliver such further instruments and documents and take such other actions as the other party may reasonably request in order to consummate the transactions contemplated hereby and effectuate the purposes of this Agreement.

SECTION 5.02. *Tenneco Name.* Industrial Company shall grant to each of Tenneco and Shipbuilding Company transition licenses, in the forms of Exhibit P and Q, respectively (the "*Transition Trademark License*"), to use the Tenneco Trademarks and Tradenames for the limited use as more fully described below in this Section 5.02 and in Section 5.03. Each of Tenneco and Shipbuilding Company shall, and shall cause each of the other members of its Group over which it has legal or effective direct or indirect control to, at its own expense:

(a) Within 30 days following the Distribution Date, change, if necessary, its corporate name to delete therefrom the word "Tenneco" or any other word that is confusingly similar to the word "Tenneco" (except the word "Tennessee"); and

(b) With respect to Tenneco, within two years following the Distribution Date, and, with respect to Shipbuilding Company, within one year following the Distribution Date, remove any and all references to the Tenneco Trademark and Tradenames from any and all signs, displays or other identification or advertising material (excluding any such material that is the subject of Section 5.03 below). After the conclusion of such period, each of Tenneco, Shipbuilding Company, and each other member of its respective Group or over which it has legal or effective direct or indirect control shall not use or display any of the Tenneco Trademarks and Tradenames without the prior written consent of Industrial Company, which consent may be withheld for any reason or no reason whatsoever. After the Distribution Date, no party hereto shall represent or permit to be represented to any third Person that it or any member of its Group has a business affiliation with any other party hereto or any member of such other party's Group, except as expressly permitted by any of the Ancillary Agreements.

SECTION 5.03. *Supplies and Documents.* Notwithstanding the provisions of Section 5.02 above, for a period of six (6) months following the Distribution Date, the Transition Trademark License shall license (on a nonexclusive basis) to each of the members of the Energy Group and the Shipbuilding Group the right to use existing supplies and documents which have imprinted thereon any of the Tenneco Trademarks and Tradenames to the extent that such supplies and documents were existing in the inventory of such member of the Energy Group or Shipbuilding Group, as applicable, as of the Distribution Date.

SECTION 5.04. *Assumption and Satisfaction of Liabilities.* Except as otherwise specifically set forth in any Ancillary Agreement, from and after the Distribution Date:

(a) Tenneco shall, and shall cause each of the other members of the Energy Group over which it has legal or effective direct or indirect control to, assume, pay, perform and discharge all Energy Liabilities in accordance with their terms, when determinable, and otherwise as determined in accordance with the practice of the parties prior to the Distributions;

(b) Industrial Company shall, and shall cause each of the other members of the Industrial Group over which it has legal or effective direct or indirect control to, assume, pay, perform and discharge all Industrial Liabilities in accordance with their terms, when determinable, and otherwise as determined in accordance with the practice of the parties prior to the Distributions; and

(c) Shipbuilding Subsidiary shall, and shall cause each of the other members of the Shipbuilding Group over which it has legal or effective direct or indirect control to, assume, pay, perform and discharge all Shipbuilding Liabilities in accordance with their terms, when determinable, and otherwise as determined in accordance with the practice of the parties prior to the Distributions.

SECTION 5.05. *No Representations or Warranties; Consents.*

(a) *General.* Each of the parties hereto understands and agrees that no party hereto is, in this Agreement or in any other agreement or document contemplated by this Agreement (including the Ancillary Agreements) or otherwise, making any representation or warranty whatsoever, including without limitation, any representation or warranty:

(i) as to the value or freedom from encumbrance of, or any other matter concerning, any assets of such party; or

(ii) as to the legal sufficiency to convey title to any asset as of the execution, delivery and filing of this Agreement or any Ancillary Agreement, including, without limitation, any Conveyancing and Assumption Instrument.

(b) *Disclaimer of Merchantability or Fitness of Assets.* Each party hereto further understands and agrees that there are no warranties, express or implied, as to the merchantability or fitness of any of the assets either transferred to or retained by the Energy Group, the Industrial Group or the Shipbuilding Group, as the case may be, pursuant to Corporate Restructuring Transactions and the other terms and provisions of this Agreement, any Conveyancing and Assumption Agreement or any Ancillary Agreement, and all such assets which are so transferred will be transferred on an "AS IS, WHERE IS" basis, and the party to which any such assets are transferred hereunder, or which retains assets hereunder, shall bear the economic and legal risk that any conveyances of such assets shall prove to be insufficient or that the title of such party or any other member of its respective Group to any such assets shall be other than good and marketable and free from encumbrances.

(c) *Acknowledgement of Disclosure and Waiver.* Each of Industrial Company and Shipbuilding Company acknowledges, for itself and on behalf of each other member of its respective Group, that:

(i) Tenneco and the other members of the Energy Group have disclosed, and Industrial Company and Shipbuilding Company have knowledge of, all matters pertaining to the assets and properties to be conveyed to Industrial Company, Shipbuilding Company or any member of their respective Group pursuant to the Corporate Restructuring Transactions or otherwise pursuant to the other terms of this Agreement to the same extent that Tenneco and the other members of the Energy Group have knowledge of such matters; and

(ii) such knowledge constitutes notice and disclosure of such matters.

Each of Industrial Company and Shipbuilding Company waives, to the fullest extent permitted by law, for itself and for each other member of its respective Group, any and all claims or causes of action which any of them may have arising out of such matters or the failure of any Conveyancing and Assumption Instrument to describe or refer to, or provide notice of, any such matters.

(d) *No Representations or Warranties Regarding Consents.* Each of the parties hereto understands and agrees that no party hereto is, in this Agreement or any Ancillary Agreement or in any other agreement or document contemplated by this Agreement or any Ancillary Agreement or otherwise, representing or warranting in any way that the obtaining of any consents or approvals, the execution and delivery of any amendatory agreements and the making of any filings or applications contemplated by this Agreement will satisfy the provisions of any or all applicable agreements or the requirements of any or all applicable Law. Each of the parties hereto further agrees and understands that the party to which any assets are transferred as contemplated by the Corporate Restructuring Transactions or the other provisions of this Agreement shall bear the economic and legal risk that any necessary consents or approvals are not obtained, that any necessary amendatory agreements are not executed and delivered or that any requirements of Laws are not complied with.

(e) *Covenant to Use Reasonable Efforts to Obtain Consents.* Notwithstanding the provisions of Section 5.05(d) above, each of the parties hereto shall (and shall cause each other member of its respective Group over which it has direct or indirect legal or effective control to) use commercially reasonable efforts to obtain all consents and approvals, to enter into all amendatory agreements and to make all filings and applications which may be reasonably required for the consummation of the transactions contemplated by this Agreement and shall take all such further reasonable actions as shall be reasonably necessary to preserve for each of the Energy Group, the Industrial Group and the Shipbuilding Group, to the greatest extent feasible, the economic and operational benefits of the allocation of assets and Liabilities contemplated by this Agreement. In case at any time after the Distribution Date any further action is necessary or desirable to carry out the purposes of this Agreement, the proper officers and directors of each party to this Agreement shall take all such necessary or desirable action.

SECTION 5.06. Removal of Certain Guarantees.

(a) *Removal of Energy Group as Guarantor of Industrial and Shipbuilding Liabilities.* Except as otherwise contemplated in the Corporate Restructuring Transactions or otherwise specified in any Ancillary Agreement, each of Tenneco, Industrial Company and Shipbuilding Company shall use its commercially reasonable efforts to have, on or prior to the Distribution Date, or as soon as practicable thereafter, Tenneco and any other member of the Energy Group removed as a guarantor of, or obligor under or for, any Industrial Liability or Shipbuilding Liability.

(b) *Removal of Industrial Group as Guarantor of Energy and Shipbuilding Liabilities.* Except as otherwise contemplated in the Corporate Restructuring Transactions or otherwise specified in any Ancillary Agreement, each of Tenneco, Industrial Company and Shipbuilding Company shall use its commercially reasonable efforts to have, on or prior to the Distribution Date, or as soon as practicable thereafter, Industrial Company and any other member of the Industrial Group removed as a guarantor of, or obligor under or for, any Energy Liability or Shipbuilding Liability.

(c) *Removal of Shipbuilding Group as Guarantor of Energy and Industrial Liabilities.* Except as otherwise contemplated in the Corporate Restructuring Transactions or otherwise specified in any Ancillary Agreement, each of Tenneco, Industrial Company and Shipbuilding Company shall use their commercially reasonable efforts to have, on or prior to the Distribution Date, or as soon as practicable thereafter, Shipbuilding Company and any other member of the Shipbuilding Group removed as a guarantor of, or obligor under or for, any Energy Liability or Industrial Liability.

SECTION 5.07. Public Announcements. Each party hereto shall consult with each other before issuing any press release or otherwise issuing any other similar written public statement with respect to this Agreement or the Distributions and shall not issue any such press release or make any such public statement without the prior consent of each other party, which shall not be unreasonably withheld; *provided, however*, that a party may, without the prior consent of any other party, issue such press release or other similar written public statement as may be required by law or any listing agreement with a national securities exchange to which any party hereto (or any member of such party's Group) is a party if it has used all reasonable efforts to consult with such other party and to obtain such party's consent but has been unable to do so in a timely manner.

SECTION 5.08. *Intercompany Agreements.* Effective as of the consummation of the Distributions, each of Industrial Company, Shipbuilding Company and Tenneco shall (and shall cause each other member of its respective Group over which it has legal or effective direct or indirect control) to terminate each and every agreement between it and any member of any of the other Groups other than this Agreement, any of the Ancillary Agreements and any of the license agreements referred to in Section 2.06(f) above; provided, however, that such termination shall not have any effect whatsoever on any of its rights and/or obligations that accrued or were incurred prior to the Distribution Date (subject to the terms of Section 2.13 above).

SECTION 5.09. *Tax Matters.* Each of Tenneco, the Industrial Company and the Shipbuilding Company intend the Distributions to be treated as tax-free distributions under Code Section 355 and each such party shall use its reasonable best efforts to cause the Distributions to so qualify. Neither Tenneco, on the one hand, nor the Industrial Company and Shipbuilding Company, on the other hand, shall take any action (other than the Merger) which might cause:

- (i) the Distributions to fail to qualify as tax-free distributions under Code Section 355;
- (ii) any other transfer described in the Corporate Restructuring Transactions that is intended (as described in Tenneco's request for rulings from the Internal Revenue Service) to qualify as a tax free transfer under Code Sections 332, 351, 355 or 368 to fail to so qualify; or
- (iii) Tenneco or any Energy Subsidiary to recognize any gains relating to deferred intercompany transactions or excess loss accounts between or among any member of affiliated group of corporations of which Tenneco is the common parent, other than those defined intercompany gains listed on Exhibit H to the Merger Agreement.

ARTICLE VI

ACCESS TO INFORMATION

SECTION 6.01. *Provision, Transfer and Delivery of Applicable Corporate Records.*

(a) ***Provision, Transfer and Delivery of Industrial Records.*** Each of Tenneco and Shipbuilding Company shall (and shall cause each other member of its respective Group over which it has legal or effective direct or indirect control to) arrange as soon as practicable following the Distribution Date for the transportation (at Industrial Company's cost) to Industrial Company of the Books and Records in its possession (i) that relate primarily to the Industrial Business or are necessary to operate the Industrial Business (collectively, the "*Industrial Records*"), and (ii) that consist of the corporate minutes of the Board of Directors (or committees thereof) of Tenneco or otherwise relate to the business, administrative and management operations of Tenneco as the parent holding company of the Energy Business, Industrial Business and Shipbuilding Business (collectively, the "*Tenneco Corporate Records*") except to the extent such items are already in the possession of any member of the Industrial Group. The Industrial Records and the Tenneco Corporate Records shall be the property of Industrial Company, but shall be available to each of Tenneco and Shipbuilding Company for review and duplication, at their cost, pursuant to the terms of this Agreement.

(b) ***Provision, Transfer and Delivery of Shipbuilding Records.*** Each of Tenneco and Industrial Company shall (and shall cause each other member of its respective Group over which it has legal or effective direct or indirect control to) arrange as soon as practicable following the Distribution Date for the transportation (at Shipbuilding Company's cost) to Shipbuilding Company of the Books and Records in its possession that relate primarily to the Shipbuilding Business or are necessary to operate the Shipbuilding Business (collectively, the "*Shipbuilding Records*"), except to the extent such items are already in the possession of any member of the Shipbuilding Group. The Shipbuilding Records shall be the property of Shipbuilding Company, but shall be available to each of Tenneco and Industrial Company for review and duplication, at their cost, pursuant to the terms of this Agreement.

(c) ***Provision, Transfer and Delivery of Energy Records.*** Each of Industrial Company and Shipbuilding Company shall (and shall cause each other member of its respective Group over which it has legal or effective direct or indirect control to) arrange as soon as practicable following the Distribution Date for the transportation (at Tenneco's cost) to Tenneco of the Books and Records in its possession that relate primarily to the Energy

Business or are necessary to operate the Energy Business (collectively, the "*Energy Records*"), except to the extent such items are already in the possession of any member of the Energy Group. The Energy Records shall be the property of Tenneco, but shall be available to each of Industrial Company and Shipbuilding Company for review and duplication, at their cost, pursuant to the terms of this Agreement.

SECTION 6.02. Access to Information.

(a) *Access to Books and Records.* Unless otherwise contemplated by Section 6.06 hereof, from and after the Distribution Date, each of Tenneco, Industrial Company and Shipbuilding Company shall (and shall cause each of the other members of its respective Group over which it has legal or effective direct or indirect control to) afford to each other party and its authorized accountants, counsel and other designated representatives reasonable access and duplicating rights (all such duplicating costs to be borne by the requesting party) during normal business hours, subject to appropriate restrictions for classified, privileged or confidential information, to the personnel, properties, Books and Records and other data and information of such party and each other member of such party's Group relating to operations prior to the Distributions insofar as such access is reasonably required by the other requesting party for the conduct of the requesting party's business (but not for competitive purposes).

(b) *Provision of Post-Distribution Commission Filings.* For a period of five years following the Distribution Date, each of Tenneco, Industrial Company and Shipbuilding Company shall (and shall cause each of the other members of its respective Group over which it has legal or effective direct or indirect control to) provide to the other, promptly following such time at which such documents are filed with the Commission, all documents (other than documents or portions thereof for which confidential treatment has been granted or a request for confidential treatment is pending) filed by it and by each other member of such party's Group with the Commission pursuant to the Securities Act or the periodic and interim reporting requirements of the Exchange Act and the rules and regulations of the Commission promulgated thereunder.

SECTION 6.03. Reimbursement; Other Matters. Except to the extent otherwise contemplated hereby or by any Ancillary Agreement, a party providing Books and Records or access to information to any other party (or such party's representatives) under this Article VI shall be entitled to receive from such other party, upon the presentation of invoices therefor, payments for such amounts, relating to supplies, disbursements and other out-of-pocket expenses, as may be reasonably incurred in providing such Books and Records or access to information.

SECTION 6.04. Confidentiality.

(a) *General Restriction on Disclosure.* Each of Tenneco, Industrial Company and Shipbuilding Company shall not (and shall not permit any other member of its respective Group over which it has legal or effective direct or indirect control to) use or permit the use of (without the prior written consent of the other) and shall hold, and shall cause its consultants, advisors and other representatives and any other member of its respective Group (over which it has legal or effective direct or indirect control) to hold, in strict confidence, all information concerning each other party hereto and the other members of such other party's Group in its possession, custody or control to the extent such information either

(i) relates to the period up to the Distribution Date,

(ii) relates to any Ancillary Agreement, or

(iii) is obtained in the course of performing services for the other party pursuant to any Ancillary Agreement, and each party hereto shall not (and shall cause each other member of its respective Group over which it has legal or effective direct or indirect control not to) otherwise release or disclose such information to any other Person, except its auditors, attorneys, financial advisors, bankers and other consultants and advisors, without the prior written consent of the other affected party or parties, unless compelled to disclose such information by judicial or administrative process or unless such disclosure is required by Law and such party has used commercially reasonable efforts to consult with the other affected party or parties prior to such disclosure.

(b) *Compelled Disclosure.* To the extent that a party hereto is compelled by judicial or administrative process to disclose such information under circumstances in which any evidentiary privilege would be available, such party agrees to assert such privilege in good faith prior to making such disclosure. Each of the parties shall consult with each relevant other party in connection with any such judicial or administrative process, including, without limitation, in determining whether any privilege is available, and shall not object to each such relevant party and its counsel participating in any hearing or other proceeding (including, without limitation, any appeal of an initial order to disclose) in respect of such disclosure and assertion of privilege.

(c) *Exceptions to Confidential Treatment.* Anything herein to the contrary notwithstanding, no party hereto shall be prohibited from using or permitting the use of, or required to hold in confidence, any information to the extent that (i) such information has been or is in the public domain through no fault of such party, (ii) such information is, after the Distribution Date, lawfully acquired from other sources by such party, or (iii) this Agreement, any Ancillary Agreement or any other agreement entered into pursuant hereto permits the use or disclosure of such information by such party.

SECTION 6.05. *Witness Services.* At all times from and after the Distribution Date, each of Tenneco, Industrial Company and Shipbuilding Company shall use its reasonable efforts to make available to each other party hereto, upon reasonable written request, the officers, directors, employees and agents of each member of its respective Group for fact finding, consultation or interviews and as witnesses to the extent that:

(a) such persons may reasonably be required in connection with the prosecution or defense of any Action in which the requesting party or any member of its respective Group may from time to time be involved; and

(b) there is no conflict in the Action between the requesting party or any member of its respective Group and the party to which a request is made pursuant to this Section 6.05 or any member of such party's Group. Except as otherwise agreed by the parties, a party providing witness services to any other party under this Section shall be entitled to receive from the recipient of such services, upon the presentation of invoices therefor, payments for such amounts, relating to supplies, disbursements and other out-of-pocket expenses (but not salary expenses) and direct and indirect costs of employees who participate in fact finding, consultation or interviews or are witnesses, as are actually and reasonably incurred in providing such fact finding, consulting, interviews or witness services by the party providing such services.

SECTION 6.06. *Retention of Records.* Except when a longer period is required by Law or is specifically provided for herein or in any Ancillary Agreement, each party hereto shall cause the members of its Group over which it has legal or effective direct or indirect control, to retain, for a period of at least seven years following the Distribution Date, all material information (including without limitation all material Books and Records) relating to such Group and its operations prior to the Distribution Date. Notwithstanding the foregoing, any party hereto may offer in writing to deliver to the other parties all or a portion of such information as it relates to members of the offering party's Group and, if such offer is accepted in writing within 90 days after receipt thereof, the offering party shall promptly arrange for the delivery of such information (or copies thereof) to each accepting party (at the expense of such accepting party). If such offer is not so accepted, the offered information may be destroyed or otherwise disposed of by the offering party at any time thereafter.

SECTION 6.07. *Privileged Matters.*

(a) *Privileged Information.* Each of the parties hereto shall, and shall cause the members of its Group over which it has legal or effective direct or indirect control to, use its reasonable efforts to maintain, preserve, protect and assert all privileges including, without limitation, all privileges arising under or relating to the attorney-client relationship (including without limitation the attorney-client and attorney work product privileges) that relate directly or indirectly to any member of any other Group for any period prior to the Distribution Date ("*Privilege*" or "*Privileges*"). Each of the parties hereto shall use its reasonable efforts not to waive, or permit any member of its Group over which it has legal or effective direct or indirect control to waive, any such Privilege that could be asserted under applicable Law without the prior written consent of the other parties. With respect to each party, the rights and obligations created by this Section 6.07 shall apply to all information as to which a member of any Group did assert or, but for the

Distributions, would have been entitled to assert the protection of a Privilege ("Privileged Information") including, but not limited to, any and all information that either:

(i) was generated or received prior to the Distribution Date but which, after the Distributions, is in the possession of a member of another Group; or

(ii) is generated or received after the Distribution Date but refers to or relates to Privileged Information that was generated or received prior to the Distribution Date.

(b) *Production of Privileged Information.* Upon receipt by a party or any member of its Group of any subpoena, discovery or other request that arguably calls for the production or disclosure of Privileged Information, or if a party or any member of its Group obtains knowledge that any current or former employee of such party or any member of its Group has received any subpoena, discovery or other request which arguably calls for the production or disclosure of Privileged Information, such party shall promptly notify the other parties of the existence of the request and shall provide the other parties a reasonable opportunity to review the information and to assert any rights it may have under this Section 6.07 or otherwise to prevent the production or disclosure of Privileged Information. No party will, or will permit any member of its Group over which it has direct or indirect legal or effective control to, produce or disclose any information arguably covered by a Privilege under this Section 6.07 unless:

(i) each other party has provided its express written consent to such production or disclosure; or

(ii) a court of competent jurisdiction has entered an order which is not then appealable or a final, nonappealable order finding that the information is not entitled to protection under any applicable privilege.

(c) *No Waiver.* The parties hereto understand and agree that the transfer of any Books and Records or other information between any members of the Energy Group, the Industrial Group, or the Shipbuilding Group shall be made in reliance on the agreements of Tenneco, Industrial Company and Shipbuilding Company, as set forth in Section 6.04 and Section 6.07 hereof, to maintain the confidentiality of Privileged Information and to assert and maintain all applicable Privileges. The Books and Records being transferred pursuant to Section 6.01 hereof, the access to information being granted pursuant to Section 6.02 hereof, the agreement to provide witnesses and individuals pursuant to Section 6.05 hereof and the transfer of Privileged Information to either party pursuant to this Agreement shall not be deemed a waiver of any Privilege that has been or may be asserted under this Section or otherwise.

ARTICLE VII INDEMNIFICATION

SECTION 7.01. *Indemnification by Tenneco.* Except as otherwise specifically set forth in any provision of this Agreement or of any Ancillary Agreement, Tenneco shall, to the fullest extent permitted by law, indemnify, defend and hold harmless the Industrial Indemnitees and the Shipbuilding Indemnitees from and against any and all Indemnifiable Losses of the Industrial Indemnitees and the Shipbuilding Indemnitees, respectively, arising out of, by reason of or otherwise in connection with either (i) the Energy Liabilities, or (ii) the breach by Tenneco of any provision of this Agreement or any Ancillary Agreement.

SECTION 7.02. *Indemnification by Industrial Company.* Except as otherwise specifically set forth in any provision of this Agreement or of any Ancillary Agreement, Industrial Company shall, to the fullest extent permitted by law, indemnify, defend and hold harmless the Energy Indemnitees and the Shipbuilding Indemnitees from and against any and all Indemnifiable Losses of the Energy Indemnitees and the Shipbuilding Indemnitees, respectively, arising out of, by reason of or otherwise in connection with either (i) the Industrial Liabilities, or (ii) the breach by Industrial Company of any provision of this Agreement or any Ancillary Agreement.

SECTION 7.03. *Indemnification by Shipbuilding Company.* Except as otherwise specifically set forth in any provision of this Agreement or of any Ancillary Agreement, Shipbuilding Company shall, to the fullest

entent permitted by law, indemnify, defend and hold harmless the Energy Indemnitees and the Industrial Indemnitees from and against any and all Indemnifiable Losses of the Energy Indemnitees and the Industrial Indemnitees, respectively, arising out of, by reason of or otherwise in connection with either (i) the Shipbuilding Liabilities, or (ii) the breach by Shipbuilding Company of any provision of this Agreement or any Ancillary Agreement. In addition, and without limiting the generality of the foregoing indemnification provisions of this Section 7.03, Shipbuilding Company shall, to the fullest extent permitted by law, indemnify, defend and hold harmless the Industrial Indemnitees and the Energy Indemnitees from and against any and all Indemnifiable Losses of the Industrial Indemnitees and the Energy Indemnitees, respectively, arising out of, by reason of or otherwise in connection with any matter, of whatever kind or nature, relating in any way to the commercial ships commonly known as the "Double Eagle" product tankers, including without limitation, (i) the design, engineering or construction of any of the Double Eagle product tankers, (ii) the sale or other disposition of any of the Double Eagle product tankers (or the sale or other disposition of any direct or indirect equity interest in any of the Double Eagle product tankers), (iii) the direct or indirect financing of the construction of any of the Double Eagle product tankers or any other financing relating to any of the Double Eagle product tankers, (iv) the direct or indirect equity investments in any of the Double Eagle product tankers, (v) the purchase of raw materials and other materials and services in connection with the design, construction or engineering of any of the Double Eagle product tankers, (vi) the negotiation of any contract for the construction of or financing for the construction of, any of the Double Eagle product tankers, or (vii) the operation by any Person whatsoever of any of the Double Eagle product tankers.

SECTION 7.04. *Limitations on Indemnification Obligations.*

(a) ***Reductions for Insurance Proceeds and Other Recoveries.*** The amount that any party (an "Indemnifying Party") is or may be required to pay to any other Person (an "Indemnitee") pursuant to Section 7.01, Section 7.02 or Section 7.03 above, as applicable, shall be reduced (retroactively or prospectively) by any Insurance Proceeds or other amounts actually recovered from third parties by or on behalf of such Indemnitee in respect of the related Indemnifiable Losses (except that nothing herein shall be construed as requiring any Indemnitee in respect of any Shipbuilding Securities Liability to file any claim for insurance). The existence of a claim by an Indemnitee for insurance or against a third party in respect of any Indemnifiable Loss shall not, however, delay any payment pursuant to the indemnification provisions contained herein and otherwise determined to be due and owing by an Indemnifying Party. Rather the Indemnifying Party shall make payment in full of such amount so determined to be due and owing by it against an assignment by the Indemnitee to the Indemnifying Party of the entire claim of the Indemnitee for such insurance or against such third party. Notwithstanding any other provisions of this Agreement, it is the intention of the parties hereto that no insurer or any other third party shall be (i) entitled to a benefit it would not be entitled to receive in the absence of the foregoing indemnification provisions or (ii) relieved of the responsibility to pay any claims for which it is obligated. If an Indemnitee shall have received the payment required by this Agreement from an Indemnifying Party in respect of any Indemnifiable Losses and shall subsequently actually receive Insurance Proceeds or other amounts in respect of such Indemnifiable Losses, then such Indemnitee shall hold such Insurance Proceeds in trust for the benefit of such Indemnifying Party and shall pay to such Indemnifying Party a sum equal to the amount of such Insurance Proceeds or other amounts actually received, up to the aggregate amount of any payments received from such Indemnifying Party pursuant to this Agreement in respect of such Indemnifiable Losses.

(b) ***Foreign Currency Adjustments.*** In the event that any indemnification payment required to be made hereunder or under any Ancillary Agreement shall be denominated in a currency other than U.S. Dollars, the amount of such payment shall be translated into U.S. Dollars using the foreign exchange rate for such currency determined in accordance with the following rules:

(i) with respect to any Indemnifiable Losses arising from the payment by a financial institution under a guarantee, comfort letter, letter of credit, foreign exchange contract or similar instrument, the foreign exchange rate for such currency shall be determined as of the date on which such financial institution shall have been reimbursed;

(ii) with respect to any Indemnifiable Losses covered by insurance, the foreign exchange rate for such currency shall be the foreign exchange rate employed by the insurance company providing such insurance in settling such Indemnifiable Losses with the Indemnifying Party; and

(iii) with respect to any Indemnifiable Losses not covered by either clause (i) or (ii) above, the foreign exchange rate for such currency shall be determined as of the date that notice of the claim with respect to such Indemnifiable Losses shall be given to the Indemnitee.

SECTION 7.05. Procedures for Indemnification. Except as otherwise specifically provided in any Ancillary Agreement, including, without limitation, the Tax Sharing Agreement and the Benefits Agreement:

(a) *Notice of Third Party Claims.* If a claim or demand is made against an Indemnitee by any Person who is not a member of the Energy Group, Industrial Group or Shipbuilding Group (a "Third Party Claim") as to which such Indemnitee is entitled to indemnification pursuant to this Agreement, such Indemnitee shall notify the Indemnifying Party in writing, and in reasonable detail, of the Third Party Claim promptly (and in any event within 15 business days) after receipt by such Indemnitee of written notice of the Third Party Claim; *provided, however,* that failure to give such notification shall not affect the Indemnitee's right to indemnification hereunder except to the extent the Indemnifying Party shall have been actually prejudiced as a result of such failure (except that the Indemnifying Party shall not be liable for any expenses incurred during the period in which the Indemnitee failed to give such notice). Thereafter, the Indemnitee shall deliver to the Indemnifying Party, promptly (and in any event within 15 business days) after the Indemnitee's receipt thereof, copies of all notices and documents (including court papers) received by the Indemnitee relating to the Third Party Claim.

(b) *Legal Defense of Third Party Claims.* If a Third Party Claim is made against an Indemnitee, the Indemnifying Party shall be entitled to participate in the defense thereof and, if it so chooses, to assume the defense thereof with counsel selected by the Indemnifying Party, which counsel shall be reasonably satisfactory to the Indemnitee. Should the Indemnifying Party so elect to assume the defense of a Third Party Claim, the Indemnifying Party shall not be liable to the Indemnitee for legal or other expenses subsequently incurred by the Indemnitee in connection with the defense thereof. If the Indemnifying Party assumes such defense, the Indemnitee shall have the right to participate in the defense thereof and to employ counsel, at its own expense, separate from the counsel employed by the Indemnifying Party, it being understood that the Indemnifying Party shall control such defense. The Indemnifying Party shall be liable for the reasonable fees and expenses of counsel employed by the Indemnitee for any period during which the Indemnifying Party has failed to assume the defense of the Third Party Claim (other than during the period prior to the time the Indemnitee shall have given notice of the Third Party Claim as provided above). If the Indemnifying Party so elects to assume the defense of any Third Party Claim, all of the Indemnitees shall cooperate with the Indemnifying Party in the defense or prosecution thereof. Notwithstanding the foregoing:

(i) the Indemnifying Party shall not be entitled to assume the defense of any Third Party Claim (and shall be liable to the Indemnitee for the reasonable fees and expenses of counsel incurred by the Indemnitee in defending such Third Party Claim) if the Third Party Claim either (A) seeks an order, injunction or other equitable relief or relief for other than money damages against the Indemnitee which the Indemnitee reasonably determines, after conferring with its counsel, cannot be separated from any related claim for money damages; *provided, however,* that if such equitable relief or other relief portion of the Third Party Claim can be so separated from that for money damages, the Indemnifying Party shall be entitled to assume the defense of the portion relating to money damages; or (B) relates to or arises out of any Shipbuilding Securities Liability.

(ii) an Indemnifying Party shall not be entitled to assume the defense of any Third Party Claim (and shall be liable for the reasonable fees and expenses of counsel incurred by the Indemnitee in defending such Third Party Claim) if, in the Indemnitee's reasonable judgment, a conflict of interest between such Indemnitee and such Indemnifying Party exists in respect of such Third Party Claim; and

(iii) if at any time after assuming the defense of a Third Party Claim an Indemnifying Party shall fail to prosecute or withdraw from the defense of such Third Party Claim, the Indemnitee shall be entitled to resume the defense thereof and the Indemnifying Party shall be liable for the reasonable fees and expenses of counsel incurred by the Indemnitee in such defense.

(c) *Settlement of Third Party Claims.* Except as otherwise provided below in this Section 7.05(c), or as otherwise specifically provided in any Ancillary Agreement, including without limitation, the Tax Sharing Agreement and the Benefits Agreement, if the Indemnifying Party has assumed the defense of any Third Party Claim, then

(i) in no event will the Indemnitee admit any liability with respect to, or settle, compromise or discharge, any Third Party Claim without the Indemnifying Party's prior written consent; *provided, however,* that the Indemnitee shall have the right to settle, compromise or discharge such Third Party Claim without the consent of the Indemnifying Party if the Indemnitee releases the Indemnifying Party from its indemnification obligation hereunder with respect to such Third Party Claim and such settlement, compromise or discharge would not otherwise adversely affect the Indemnifying Party, and

(ii) the Indemnitee will agree to any settlement, compromise or discharge of a Third Party Claim that the Indemnifying Party may recommend and that by its terms obligates the Indemnifying Party to pay the full amount of the liability in connection with such Third Party Claim and releases the Indemnitee completely in connection with such Third Party Claim and that would not otherwise adversely affect the Indemnitee.

provided, however, that the Indemnitee may refuse to agree to any such settlement, compromise or discharge if the Indemnitee agrees that the Indemnifying Party's indemnification obligation with respect to such Third Party Claim shall not exceed the amount that would be required to be paid by or on behalf of the Indemnifying Party in connection with such settlement, compromise or discharge. If the Indemnifying Party has not assumed the defense of a Third Party Claim then in no event shall the Indemnitee settle, compromise or discharge such Third Party Claim without providing prior written notice to the Indemnifying Party, which shall have the option within 15 business days following receipt of such notice to

(i) approve and agree to pay the settlement,

(ii) approve the amount of the settlement, reserving the right to contest the Indemnitee's right to indemnity pursuant to this Agreement,

(iii) disapprove the settlement and assume in writing all past and future responsibility for such Third Party Claim (including all of Indemnitee's prior expenditures in connection therewith), or

(iv) disapprove the settlement and continue to refrain from participation in the defense of such Third Party Claim, in which event the Indemnifying Party shall have no further right to contest the amount or reasonableness of the settlement if the Indemnitee elects to proceed therewith.

In the event the Indemnifying Party does not respond to such written notice from the Indemnitee within such 15 business-day period, the Indemnifying Party shall be deemed to have elected option (i).

(d) *Other Claims.* Any claim on account of an Indemnifiable Loss which does not result from a Third Party Claim shall be asserted by written notice given by the Indemnitee to the applicable Indemnifying Party. Such Indemnifying Party shall have a period of 15 business days after the receipt of such notice within which to respond thereto. If such Indemnifying Party does not respond within such 15 business-day period, such Indemnifying Party shall be deemed to have refused to accept responsibility to make payment. If such Indemnifying Party does not respond within such 15 business-day period or rejects such claim in whole or in part, such Indemnitee shall be free to pursue such remedies as may be available to such party under applicable Law or under this Agreement.

SECTION 7.06. Indemnification Payments. Indemnification required by this Article VII shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or loss, liability, claim, damage or expense is incurred.

SECTION 7.07. Other Adjustments.

(a) *Adjustments for Taxes.* The amount of any Indemnifiable Loss shall be:

(i) increased to take into account any net Tax cost actually incurred by the Indemnitee arising from any payments received from the Indemnifying Party (grossed up for such increase); and

(ii) reduced to take account of any net Tax benefit actually realized by the Indemnatee arising from the incurrence or payment of any such Indemnifiable Loss.

In computing the amount of such Tax cost or Tax benefit, the Indemnatee shall be deemed to recognize all other items of income, gain, loss, deduction or credit before recognizing any item arising from the receipt of any payment with respect to an Indemnifiable Loss or the incurrence or payment of any Indemnifiable Loss.

(b) *Reductions for Subsequent Recoveries or Other Events.* In addition to any adjustments required pursuant to Section 7.04 hereof or Section 7.07(a) above, if the amount of any Indemnifiable Losses shall, at any time subsequent to any indemnification payment made by the Indemnifying Party pursuant to this Article VII, be reduced by recovery, settlement or otherwise, the amount of such reduction, less any expenses incurred in connection therewith, shall promptly be repaid by the Indemnatee to the Indemnifying Party, up to the aggregate amount of any payments received from such Indemnifying Party pursuant to this Agreement in respect of such Indemnifiable Losses.

SECTION 7.08. *Obligations Absolute.* The foregoing contractual obligations of indemnification set forth in this Article VII shall:

(i) also apply to any and all Third Party Claims that allege that any Indemnatee is independently, directly, vicariously or jointly and severally liable to such third party;

(ii) to the extent permitted by applicable law, apply even if the Indemnatee is partially negligent or otherwise partially culpable or at fault, whether or not such liability arises under any doctrine of strict liability; and

(iii) be in addition to any liability or obligation that an Indemnifying Party may have other than pursuant to this Agreement.

SECTION 7.09. *Survival of Indemnities.* The obligations of Tenneco, Industrial Company and Shipbuilding Company under this Article VII shall survive the sale or other transfer by any of them of any assets or businesses or the assignment by any of them of any Liabilities, with respect to any Indemnifiable Loss of any Indemnatee related to such assets, businesses or Liabilities.

SECTION 7.10. *Remedies Cumulative.* The remedies provided in this Article VII shall be cumulative and shall not preclude assertion by any Indemnatee of any other rights or the seeking of any and all other remedies against any Indemnifying Party.

SECTION 7.11. *Cooperation of the Parties With Respect to Actions and Third Party Claims.*

(a) *Identification of Party in Interest.* Any party to this Agreement that has responsibility for an Action or Third Party Claim shall identify itself as the true party in interest with respect to such Action or Third Party Claim and shall use its commercially reasonable efforts to obtain the dismissal of any other party to this Agreement from such Action or Third Party Claim.

(b) *Disputes Regarding Responsibility for Actions and Third Party Claims.* If there is uncertainty or disagreement concerning which party to this Agreement has responsibility for any Action or Third Party Claim, the following procedure shall be followed in an effort to reach agreement concerning responsibility for such Action or Third Party Claim:

(i) The parties in disagreement over the responsibility for an Action or Third Party Claim shall exchange brief written statements setting forth their position concerning which party has responsibility for the Action or Third Party Claim in accordance with the provisions of this Article VII. These statements shall be exchanged within 5 days of a party putting another party on written notice that the other party is or may be responsible for the Action or Third Party Claim.

(ii) If within 5 days of the exchange of the written statement of each party's position agreement is not reached on responsibility for the Action or Third Party Claim, the General Counsel for each of the parties in disagreement over responsibility for the Action or Third Party Claim shall speak either by telephone or in person to attempt to reach agreement on responsibility for the Action or Third Party Claim.

(c) *Effect of Failure to Follow Procedure.* Failure to follow the procedure set forth in clause (b) above shall not affect the rights and responsibilities of the parties as established by the other provisions of this Article VII.

(d) *Exchange of Information.* In connection with the handling of current or future Actions or Third Party Claims, the parties may determine that it is in their mutual interest to exchange privileged or confidential information. If so, the parties agree to discuss whether it is in their mutual interest to enter into a joint defense agreement or information exchange agreement to maintain the confidentiality of their communications and to permit them to maintain the confidentiality of proprietary information or information that is otherwise confidential or subject to an applicable privilege, including but not limited to the attorney-client, work product, executive, deliberative process, or self-evaluation privileges.

SECTION 7.12. Contribution. To the extent that any indemnification provided for under Section 7.01, Section 7.02 or Section 7.03 is unavailable to an Indemnified Party or is insufficient in respect of any the Indemnifiable Losses of such Indemnified Party then the Indemnifying Party under such Section, in lieu of indemnifying such Indemnified Party thereunder, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Indemnifiable Losses (i) in such proportion as is appropriate to reflect the relative benefits received by the Indemnifying Party on the one hand and the Indemnified Party on the other hand from the transaction or other matter which resulted in the Indemnifiable Losses or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Indemnifying Party on the one hand and of the Indemnified Party on the other hand in connection with the action, inaction, statements or omissions that resulted in such Indemnifiable Losses as well as any other relevant equitable considerations.

ARTICLE VIII MISCELLANEOUS

SECTION 8.01. Complete Agreement; Construction. This Agreement, including the Exhibits and Schedules hereto, and the Ancillary Agreements shall constitute the entire agreement between the parties with respect to the subject matter hereof and shall supersede all previous negotiations, commitments and writings with respect to such subject matter. In the event of any inconsistency between this Agreement and any Schedule or Exhibit hereto, the Schedule or Exhibit, as the case may be, shall prevail. Notwithstanding any other provisions in this Agreement to the contrary, in the event and to the extent that there shall be a conflict between the provisions of this Agreement and the provisions of any Ancillary Agreement, such Ancillary Agreement shall control.

SECTION 8.02. Ancillary Agreements. This Agreement is not intended to address, and should not be interpreted to address, the matters specifically and expressly covered by the Ancillary Agreements.

SECTION 8.03. Counterparts. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement, and shall become effective when one or more such counterparts have been signed by each of the parties and delivered to the other parties.

SECTION 8.04. Survival of Agreements. Except as otherwise expressly provided herein, all covenants and agreements of the parties contained in this Agreement shall survive the Distribution Date.

SECTION 8.05. Responsibility for Expenses.

(a) *Expenses Incurred on or Prior to Distribution Date.* Subject to the provisions of Section 8.05(c) below and except as otherwise set forth in this Agreement or any Ancillary Agreement, all costs and expenses incurred on or prior to the Distribution Date (whether or not paid on or prior to the Distribution Date) in connection with the preparation, execution, delivery and implementation of this Agreement and any Ancillary Agreement, the Information Statements and the Distribution, and the consummation of the transactions contemplated hereby and thereby shall be charged to and paid by Tenneco; *provided, however*, that (i) such amounts shall be included in the calculation of the Actual Energy Debt Amount to the extent expressly provided in the Debt and Cash Allocation Agreement, and (ii) each of Industrial Company and Shipbuilding Company shall be solely responsible and liable for any expenses, fees, or other costs that it separately and directly incurs in connection with any of the transactions contemplated under this Agreement or any of the Ancillary Agreements.

(b) *Expenses Incurred or Accrued After Distribution Date.* Subject to the provisions of Section 8.05(c) below and except as otherwise set forth in this Agreement or any Ancillary Agreement, each party shall bear its own costs and expenses first incurred or accrued after the Distribution Date.

(c) *Environmental Expenses.* Notwithstanding the provisions of Section 8.05(a) and Section 8.05(b) above, expenses and other costs incurred in connection with compliance with any Environmental Laws applicable to the transactions contemplated hereby shall be paid by the party that after the Distribution Date will, or that this Agreement contemplates will, own the assets or operate the business subject to such Environmental Laws.

SECTION 8.06. Notices. All notices and other communications to a party hereunder shall be in writing and hand delivered or mailed by registered or certified mail (return receipt requested) or sent by any means of electronic message transmission with delivery confirmed (by voice or otherwise) to such party (and will be deemed given on the date on which the notice is received by such party) at the address for such party set forth below (or at such other address for the party as the party shall, from time to time, specify by like notice to the other parties):

If to Tenneco, at: 1010 Milam Street
Houston, Texas 77002
Telecopier:
Attention: Corporate Secretary

If to Industrial Company, at: 1275 King Street
Greenwich, CT 06831
Telecopier:
Attention: Corporate Secretary

If to Shipbuilding Company, at: 4101 Washington Avenue
Newport News, Virginia 23607
Telecopier:
Attention: Corporate Secretary

SECTION 8.07. Waivers. The failure of any party hereto to require strict performance by any other party of any provision in this Agreement will not waive or diminish that party's right to demand strict performance thereafter of that or any other provision hereof.

SECTION 8.08. Amendments. Subject to the terms of Section 8.11 hereof, this Agreement may not be modified or amended except by an agreement in writing signed by the parties hereto; *provided, however*, any such amendments or modifications prior to the termination of the Merger Agreement or consummation of the Merger may only be made with the prior consent of Acquiror unless such modifications or amendments do not, individually or in the aggregate, adversely affect the Energy Business (other than to a *de minimis* extent) or materially delay or prevent the consummation of the Merger.

SECTION 8.09. Assignment. This Agreement shall be assignable in whole in connection with a merger or consolidation or the sale of all or substantially all the assets of a party hereto so long as the resulting, surviving or transferee entity assumes all the obligations of the relevant party hereto by operation of law or pursuant to an agreement in form and substance reasonably satisfactory to the other parties to this Agreement. Otherwise this Agreement shall not be assignable, in whole or in part, directly or indirectly, by any party hereto without the prior written consent of the others, and any attempt to assign any rights or obligations arising under this Agreement without such consent shall be void.

SECTION 8.10. Successors and Assigns. The provisions of this Agreement shall be binding upon, inure to the benefit of and be enforceable by the parties and their respective permitted successors and permitted assigns.

SECTION 8.11. Termination. This Agreement may be terminated and the Distributions may be amended, modified or abandoned at any time prior to the Distributions by and in the sole discretion of Tenneco without the approval of Industrial Company or Shipbuilding Company or the stockholders of Tenneco; provided, however, any such termination, abandonment, amendments or modifications prior to the termination of the Merger Agreement or consummation of the Merger may only be made with the prior written consent of Acquiror unless, in the case of a modification or amendment only, such modification or amendment does not, individually or in the aggregate, adversely affect the Energy Business (other than to a *de minimis* extent) or materially delay or prevent the consummation of the Merger. In the event of such termination, no party shall have any liability of any kind to any other party or any other person. After the Distributions, this Agreement may not be terminated except by an agreement in writing signed by all of the parties hereto; *provided, however*, that Article VIII shall not be terminated or amended after the Distributions in respect of the third party beneficiaries thereto without the consent of such persons. Nothing in this Section 8.11 shall relieve Tenneco of its obligations, under Section 6.13 of the Merger Agreement.

SECTION 8.12. Third Party Beneficiaries. Except as provided in Article VII hereof (relating to Indemnities), this Agreement is solely for the benefit of the parties hereto, the members of their respective Groups and Affiliates and the Acquiror, after giving effect to the Distributions, and should not be deemed to confer upon third parties any remedy, claim, liability, right of reimbursement, claim of action or other right in excess of those existing without reference to this Agreement.

SECTION 8.13. Attorney Fees. A party in breach of this Agreement shall, on demand, indemnify and hold harmless the other parties hereto for and against all out-of-pocket expenses, including, without limitation, reasonable legal fees, incurred by such other party by reason of the enforcement and protection of its rights under this Agreement. The payment of such expenses is in addition to any other relief to which such other party may be entitled hereunder or otherwise.

SECTION 8.14. Title and Headings. Titles and headings to sections herein are inserted for the convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

SECTION 8.15. Exhibits and Schedules. The Exhibits and Schedules attached hereto shall be construed with and as an integral part of this Agreement to the same extent as if the same had been set forth verbatim herein.

SECTION 8.16. Specific Performance. Each of the parties hereto acknowledges that there is no adequate remedy at law for the failure by such parties to comply with the provisions of this Agreement and that such failure would cause immediate harm that would not be adequately compensable in damages. Accordingly, each of the parties hereto agrees that their agreements contained herein may be specifically enforced without the requirement of posting a bond or other security, in addition to all other remedies available to the parties hereto under this Agreement.

SECTION 8.17. Governing Law. ALL QUESTIONS AND/OR DISPUTES CONCERNING THE CONSTRUCTION, VALIDITY AND INTERPRETATION OF THIS AGREEMENT AND THE SCHEDULES AND EXHIBITS HERETO SHALL BE GOVERNED BY THE INTERNAL LAWS, AND NOT THE LAW

OF CONFLICTS, OF THE STATE OF DELAWARE. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY AND UNCONDITIONALLY (i) AGREES TO BE SUBJECT TO, AND HEREBY CONSENTS AND SUBMITS TO, THE JURISDICTION OF THE COURTS OF THE STATE OF DELAWARE AND OF THE FEDERAL COURTS SITTING IN THE STATE OF DELAWARE, (ii) TO THE EXTENT SUCH PARTY IS NOT OTHERWISE SUBJECT TO SERVICE OF PROCESS IN THE STATE OF DELAWARE, HEREBY APPOINTS THE CORPORATION TRUST COMPANY, AS SUCH PARTY'S AGENT IN THE STATE OF DELAWARE FOR ACCEPTANCE OF LEGAL PROCESS AND (iii) AGREES THAT SERVICE MADE ON ANY SUCH AGENT SET FORTH IN (ii) ABOVE SHALL HAVE THE SAME LEGAL FORCE AND EFFECT AS IF SERVED UPON SUCH PARTY PERSONALLY WITHIN THE STATE OF DELAWARE.

SECTION 8.18. Severability. In the event any one or more of the provisions contained in this Agreement should be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein and therein shall not in any way be affected or impaired thereby. The parties shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions, the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

SECTION 8.19. Subsidiaries. Each of the parties hereto shall cause to be performed, and hereby guarantee the performance of, all actions, agreements and obligations set forth herein to be performed by any Subsidiary of such party which is contemplated to be a Subsidiary of such party on and after the Distribution Date.

SECTION 8.20. Shipbuilding Hedging Transactions. Notwithstanding any other provisions of this Agreement or any other document or instrument (including any of the other Ancillary Agreements), any gains or losses relating to hedging or similar transactions undertaken by Shipbuilding Company or any other member of the Shipbuilding Group which are in effect on the date hereof or at any time hereafter through the Distribution Date shall be for the account of Shipbuilding Company, and, without limiting the generality of the foregoing, (i) Shipbuilding Company and the other members of the Group shall finance and fund any such losses through their own finance facilities, and (ii) no cash or debt relating to any such gains or losses shall be taken into account in making any of the determinations under the Debt and Cash Allocation Agreement, including determinations regarding the amount of the Allocated Shipbuilding Debt and/or the Guaranteed Shipbuilding Cash Amount.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

TENNECO INC.

By _____
Name:
Title:

NEW TENNECO INC.

By _____
Name:
Title:

NEWPORT NEWS SHIPBUILDING INC.

By _____
Name:
Title:

A

KMI0000317

**EXHIBIT A
TO
DISTRIBUTION AGREEMENT
BENEFITS AGREEMENT**

THIS BENEFITS AGREEMENT is made and entered into as of this day of , 1996, by and among **TENNECO INC.**, a Delaware corporation ("Tenneco"), **NEW TENNECO INC.**, a Delaware corporation ("Industrial Company"), and **NEWPORT NEWS SHIPBUILDING INC.** (formerly known as Tenneco InterAmerica Inc.), a Delaware corporation ("Shipbuilding Company").

WHEREAS, pursuant to the terms of that certain Distribution Agreement by and among the parties hereto and dated as of , 1996 (the "*Distribution Agreement*") the parties have entered into this Agreement regarding certain labor, employment, compensation and benefit matters occasioned by the Distributions.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained in this Agreement and the Distribution Agreement, each of the parties hereto, on behalf of itself and each other member of its Group over which it has direct or indirect legal or effective control, hereby agrees as follows:

SECTION 1. Definitions. The following terms, when capitalized herein, shall have the meanings set forth below in this Section 1. All other capitalized terms which are used but are not otherwise defined herein shall have the meanings ascribed to them in the Distribution Agreement.

"Active Employees" means, with respect to each Group, all employees regularly engaged in the performance of services to, for or on behalf of any member of such Group as of the close of business on the Distribution Date.

"Former Employees" means, with respect to each Group, all former employees of Tenneco and/or its Subsidiaries (including, but not limited to, such employees who, as of the close of business on the Distribution Date, are on leave of absence, long-term disability or layoff with recall rights and the dependents of those persons) who, if they were regularly engaged in the performance of services to, for or on behalf of Tenneco or any of its Subsidiaries at the close of business on the Distribution Date, would be an Active Employee of such Group, determined on a basis consistent with the determination of the Active Employees of such Group.

"Pension Matters" means, collectively, (a) Tenneco's 1986 pension plan asset valuation and its cost accounting treatment, as described in the DCAA Audit Report dated November 28, 1995, and (b) any claim which the DCAA or any other agency of the DOD may assert that (or based on any allegation that) the aggregate amount of assets of the TRP attributable to the Active Employees and Former Employees of the Shipbuilding Group exceeds the aggregate amount of the liabilities under the TRP attributable to Active and Former Employees of the Shipbuilding Group.

"Tenneco Salaried Welfare Plans" means, collectively, the Tenneco Inc. Health Care Plan, the Tenneco Inc. Group Life Insurance Plan, the Tenneco Inc. Long Term Disability Plan, the Tenneco Inc. Travel Accident Insurance Plan, the Tenneco Inc. Health Care Flexible Spending Account Program and the Tenneco Inc. Dependent Day Care Flexible Spending Account Plan.

SECTION 2. General Employment Matters.

2.01. General Obligations. From and after the Distribution Date, each of Tenneco, Industrial Company and Shipbuilding Company shall (and shall, as applicable, cause each of the other members of its respective Group over which it has direct or indirect legal or effective control to) (a) continue the employment of all of the Active Employees of its respective Group, subject, however to the terms of Section 2.03 below and (b) except as otherwise specifically provided herein, pay, perform and discharge any and all labor, employment, compensation and benefit liabilities, whether arising prior to, on or after the Distribution Date, with respect to all such Active

Employees and all Former Employees of its respective Group. Except as specifically provided herein, each of Tenneco, Industrial Company and Shipbuilding Company shall be solely responsible for the Former Employees of its respective Group.

2.02. Initial Compensation of Active Employees. The initial compensation (base salary or wage level) of each Active Employee of each Group shall be the same as the compensation (base salary or wage level) of such Active Employee immediately prior to the Distribution Date.

2.03. No Additional Employment Rights Created. Nothing in this Agreement shall give any Active Employee of any Group any right to continued employment by any member of that Group or any other Group beyond the Distribution Date, which is in addition to or supplemental to any such right he or she may have arising under contract or otherwise.

SECTION 3. Collective Bargaining.

3.01. Continuation of Existing Collective Bargaining Agreements. Each of Tenneco, Industrial Company and Shipbuilding Company shall (and shall cause, as applicable, each other member of its Group over which it has direct or indirect legal or effective control to) continue to honor all collective bargaining agreements covering the Active Employees of its respective Group which are in effect as of the close of business on the Distribution Date, in accordance with and subject to the terms of each such collective bargaining agreement. Each of the parties hereto hereby agrees and acknowledges, however, that nothing herein, including its obligation to continue its applicable collective bargaining agreements, shall be construed to restrict any right it, or any other member of its respective Group, may have to terminate, renegotiate, reopen or otherwise seek changes in any of its collective bargaining agreements.

3.02. Recognition of Incumbent Labor Organizations. Each of Tenneco, Industrial Company and Shipbuilding Company shall (and shall cause, as applicable, each other member of its Group over which it has direct or indirect legal or effective control to) continue to recognize all incumbent labor organizations which, as of the close of business on the Distribution Date, have established collective bargaining relationships in respect of the Active Employees of its respective Group.

3.03. Continued Sponsorship of Hourly Employee Benefit Plans. Each of Tenneco, Industrial Company and Shipbuilding Company shall continue (and shall, as applicable, cause each other member of its respective Group over which it has direct or indirect legal or effective control to continue) to sponsor all hourly employee benefit plans which, as of the close of business on the Distribution Date, are in existence and relate to the Active Employees of its respective Group, subject to its rights under such plans to amend or terminate such plans.

3.04. Provision of Wages, Rights and Other Employment Benefits Required Under Existing Collective Bargaining Agreements. Without limiting the generality of the foregoing, each of Tenneco, Industrial Company and Shipbuilding Company shall provide those of its Active Employees whose employment is subject to collective bargaining agreements and/or established collective bargaining relationships with the wages, benefits, and terms and conditions of employment required by such agreements or relationships, except that (i) participation in the Tenneco Inc. Employee Stock Purchase Plan will cease as of September 30, 1996, and (ii) no additional amounts may be invested in any shares of the common stock, par value \$5.00 per share, of Tenneco ("Tenneco Common Stock") in any defined contribution plan from and after the Effective Time.

SECTION 4. United States Salaried Pension and Thrift Benefits.

4.01 Tenneco Inc. Retirement Plan. Effective as of the Distribution Date, Tenneco and Shipbuilding Company shall cease to be sponsors of the Tenneco Inc. Retirement Plan (the "TRP"), and Industrial Company shall become the sponsor of the TRP. The TRP shall retain liability for all pension benefits accrued by the Active and Former Employees of the Energy Group and Shipbuilding Group who are or were formerly participants in the TRP through the last day of the calendar month in which the Distribution Date occurs (the "Impact Date").

4.02 Amendment of TRP. After Industrial Company has become the sponsor of the TRP, it shall amend the TRP to (a) "freeze" the benefit accruals of the Active Employees of the Energy Group and Shipbuilding Group as of the Impact Date, and (b) provide that all benefits accrued as of the Impact Date by the Active Employees of either the Energy Group or the Shipbuilding Group will be fully vested and non-forfeitable, and Industrial Company shall inform, in writing, each such Active Employee of his or her accrued benefits under the TRP as of the Distribution Date; provided, however, that if the Distribution Date occurs on the Impact Date, Industrial Company shall in any event (i) first become the sponsor of the TRP as provided under Section 4.01 above, and (ii) immediately thereafter amend the TRP as provided in this Section 4.02.

4.03 No Credit for Post-Distribution Date Service. Except as may be required by law, the TRP shall not be required to count service with any entity other than Industrial Company after the Distribution Date for any purpose.

4.04 No Liability to Energy Group. Following the Distribution Date, the Energy Group will have no liability, contingent or otherwise, with respect to the TRP or any other defined benefit pension plan that is subject to Title IV of the Employee Retirement Income Security Act of 1974, as amended, including any liability for benefits accrued prior to the Distribution Date (including early retirement benefits and related subsidies) for employees of the Energy Group, and Industrial Company shall assume or retain, as the case may be, all such liabilities.

4.05 Shipbuilding Company Liabilities.

(a) **General Indemnification of Industrial Company.** Except as specifically provided in this Section 4.05, Shipbuilding Company shall retain, and shall indemnify and hold the Industrial Company harmless from, any liability incurred or accrued at any time (whether before on or after the date hereof), which has been, or may in the future be, asserted by any of (i) the Defense Contract Audit Agency ("DCAA"), (ii) the United States Navy, or (iii) any and all other agencies of, within or affiliated with the United States Department of Defense (the "DOD"), that arise or arose out of, or in connection with either (A) the participation of Active Employees or Former Employees of the Shipbuilding Group in the TRP, (B) payments made by any agency of the DOD with respect to benefits accrued under the TRP, (C) any claim by any agency of the DOD relating to the assets of the TRP, and (D) any other related matters.

(b) **Sharing of Certain Shipbuilding Company Liabilities.** Notwithstanding the foregoing, Industrial Company and Shipbuilding Company have agreed to share the cost, if any, of certain specified liabilities described in Subsection 4.05(a) above on the terms and conditions set forth in the remaining Subsections of this Section 4.05. The liabilities which Industrial Company and Shipbuilding Company have agreed to share are only those arising from a Pension Matter.

(c) **Indemnification Percentages for Pension Matters.** Industrial Company shall indemnify Shipbuilding Company from 80%, and Shipbuilding Company shall retain and indemnify Industrial Company from 20%, of the following:

- (i) all amounts paid in satisfaction of a Government claim for Pension Matters; and
- (ii) all costs incurred, including attorneys' and actuaries' fees, in defending against the Government's claims in the Pension Matters, as described in Subsection 4.05(f) below.

(d) **Control Over Pension Matters.** Industrial Company shall have total and exclusive control of and over all aspects of the defense by Industrial Company and Shipbuilding Company against the Government's claims in the Pension Matters. Without limiting the generality of the foregoing, Industrial Company shall have the exclusive right to:

- (i) engage and dismiss any and all law firms, actuarial firms and other service providers;
- (ii) settle, compromise or otherwise dispose of either Pension Matter;
- (iii) determine to not appeal any adverse determination with respect to either Pension Matter; and
- (iv) negotiate and determine the terms of a deferral agreement described in item (iv) of Subsection 4.05(e) below.

(e) **Cooperation of Shipbuilding Company.** Shipbuilding Company shall cooperate fully with Industrial Company and its attorneys, actuaries and other advisors and representatives in defending against the Government's claims in the Pension Matters. Without limiting the generality of the foregoing, Shipbuilding Company shall:

(i) advise Industrial Company in writing of any and all claims made by the Government which may be included in the Pension Matters promptly after Shipbuilding Company receives notice or otherwise becomes aware of such claims;

(ii) provide Industrial Company copies of any and all correspondence, pleadings or other papers it has or receives with respect to the Pension Matters promptly upon receipt;

(iii) give Industrial Company at least 10 days written notice of and afford Industrial Company an opportunity to be present at any and all meetings, conferences or hearings relating to such issues; and

(iv) diligently seek an agreement to defer collection of any Government claim for Pension Matters.

(f) **Billing for Payment to Government.** Whenever the Shipbuilding Company or Industrial Company makes a payment to the Government for a claim related to Pension Matters or incurs a cost in defending against the Government's claims in Pension Matters, it may bill the other party for that party's share of said claim or cost. A payment to the Government for a claim related to Pension Matters shall include (i) amounts paid directly to Government to satisfy the claim; (ii) progress payments withheld to satisfy the Government claim; and (iii) pension costs disallowed under Shipbuilding Company's new salaried pension plan to satisfy the Government claim. Costs incurred in defending against the Government's claims in the Pension Matters shall include outside attorneys' fees, accounting fees and actuary fees and all other out-of-pocket costs incurred in defending against the Government's claims. Neither Industrial Company nor Shipbuilding Company shall charge the other any amounts for the services of its employees. A bill for the other party's share of a claim or cost shall be accompanied by adequate documentation and shall be paid promptly upon receipt. However, any amounts so billed shall be subject to set-off for amounts owed by the presenter to recipient whether relating to matters covered by this Section 4.05 or otherwise.

(g) **Advances by Industrial Company.** Any amounts which Industrial Company may advance to Shipbuilding Company to satisfy a Government Claim pending appeal (regardless of whether the Government claim is satisfied by (i) direct payment to the Government; (ii) progress payments withheld; or (iii) pension costs disallowed under the Shipbuilding Company's new salaried pension plan) shall be deducted from any amount due from Industrial Company to Shipbuilding Company upon the ultimate resolution of the appeal of the Government's claim. To the extent that the amounts advanced to Shipbuilding Company by Industrial Company exceed the amount due upon the ultimate resolution of the appeal, Shipbuilding Company shall, within 5 days after the date of such ultimate resolution, reimburse such excess to Industrial Company with interest charged from the date the amount was advanced at the interest rate established by the Secretary of the Treasury under Public Law 92-41.

(h) **Prohibition Against Certain Action of Shipbuilding Company.** Shipbuilding Company shall not take any action or permit or suffer any act or omission within its control that is, or is likely to be, in any way detrimental to the defense against the Government's claims under the Pension Matters. Without limiting the generality of the preceding sentence, Shipbuilding Company will not, without the express written consent of Industrial Company, which consent may be withheld in Industrial Company's sole discretion, link either of the Pension Matters to any other matter which it now has or may in the future have pending with the Government in terms of settlement or otherwise.

(i) **Assertion of Affirmative Claims.** If Industrial Company determines to submit an affirmative claim against the Government in connection with the Pension Matters, Industrial Company and Shipbuilding Company shall share the cost of pursuing such claim and any recovery on such claim on a percentage basis of 80% for Industrial Company and 20% for Shipbuilding Company.

(j) **No Liability of Energy Business.** It is expressly acknowledged and agreed that any liabilities described in this Section 4.05 are solely liabilities of Shipbuilding Company and Industrial Company, in accordance with the terms of the other provisions of this Section 4.05, and the Energy Business has no obligation with respect to any of such liabilities.

4.06. Tenneco Inc. Thrift Plan. The active participation in the Tenneco Inc. Thrift Plan (the "*Tenneco DC Plan*") by persons other than the Active Employees of the Industrial Group shall cease effective as of the Distribution Date. In addition, each of Tenneco and Shipbuilding Company shall cease to be sponsors of the Tenneco DC Plan as of the Distribution Date and Industrial Company shall become the sponsor of the Tenneco DC Plan from and after the Distribution Date.

4.07. Establishment of Energy and Shipbuilding DC Plans.

(a) **Energy DC Plan.** Tenneco shall establish or make available on or with effect from the Distribution Date a defined contribution plan for the benefit of the Active Employees of the Energy Group (the "*Energy DC Plan*").

(b) **Shipbuilding DC Plan.** Shipbuilding Company shall establish on or with effect from the Distribution Date a defined contribution plan for the benefit of the Active Employees of the Shipbuilding Group (the "*Shipbuilding DC Plan*").

(c) **Transfer of Account Balances to Energy and Shipbuilding DC Plans.** Industrial Company shall cause the Tenneco DC Plan to transfer: (i) to the Shipbuilding DC Plan, the account balances of each Active Employee of the Shipbuilding Group and each Former Employee of the Shipbuilding Group with respect to whom the Tenneco DC Plan maintains an account as of the close of business on the Distribution Date, and (ii) to the Energy DC Plan, the account balances of each Active Employee of the Energy Group and each Former Employee of the Energy Group with respect to whom the Tenneco DC Plan maintains an account as of the close of business on the Distribution Date. Such transfers shall be in cash, except that the Energy DC Plan and the Shipbuilding DC Plan will accept the following: (i) Tenneco Common Stock (or stock of the Acquiror, as defined in the Merger Agreement) for the Tenneco Common Stock fund portion of such account balances (together with any and all of the shares of the common stock of Industrial Company and/or Shipbuilding Company distributed in connection with the Distributions); and (ii) amounts credited to the Tenneco DC Plan which are held in mutual funds which are also investment media in the Energy DC Plan or the Shipbuilding DC Plan, as the case may be.

4.08. No Tenneco Common Stock. No Tenneco Common Stock shall be offered as an investment option with respect to contributions made after the Distribution Date by any of the Tenneco DC Plan, Energy DC Plan or Shipbuilding DC Plan. The sponsor of each of the foregoing plans shall cause the plan to afford each participant therein an election to sell the stock of any entity held in the Tenneco stock fund in the Tenneco DC Plan which does not employ him or her immediately following the Distribution Date. Shipbuilding Company shall administer each defined contribution plan which it maintains consistent with any and all representations which Tenneco made to the Internal Revenue Service at any time prior to the Distribution Date. No further contributions shall be made under the Tenneco Inc. Employee Stock Purchase Plan after September 30, 1996.

SECTION 5. Pension matters outside the United States. With respect to the business and operations of each Group in jurisdictions outside the United States, each of the parties hereto shall (and, as applicable, shall cause each other member of its Group over which it has direct or indirect legal or effective control to) retain any and all pension liabilities and attendant plans and their assets related to its Active Employees and Former Employees.

SECTION 6. Executive Compensation.

6.01. Tenneco Benefit Equalization Plan and Supplement Executive Retirement Plan. None of the Active Employees of either the Shipbuilding Group or the Energy Group shall accrue any benefits under the Tenneco Benefit Equalization Plan (the "*BEP*") or the Supplement Executive Retirement Plan (the "*SERP*") from and after the Distribution Date. Industrial Company shall assume all liabilities under the BEP and the SERP and shall cause the BEP and the SERP to continue to cover the Active Employees and Former Employees of the Energy Group and Shipbuilding Group after the Distribution Date who have accrued benefits under either or both of such plans as of the close of business on the Distribution Date, and the accrued benefits of such Active Employees under such plans as of the close of business on the Distribution Date shall be fully vested and non-forfeitable. Each of Tenneco and Shipbuilding Company shall reimburse Industrial Company for any payments Industrial Company may make from time to time under the BEP or the SERP to Mr. Edward J. Casey, Jr. in the

case of the Energy Group and any Active Employee or Former Employee of the Shipbuilding Group, in the case of the Shipbuilding Group. Such charges shall be made by written notice thereof to, and shall be promptly paid by, the Energy Group and/or Shipbuilding Group, as the case may be. Tenneco shall retain and assume any and all supplemental pension obligations (and any related assets) which are in addition to benefits under the TRP, BEP and SERP under the contract with Mr. Edward J. Casey, Jr.

6.02. Tenneco Inc. Deferred Compensation Plan. The participation of the Active Employees and Former Employees of the Energy Group and the Shipbuilding Group in the Tenneco Inc. Deferred Compensation Plan (the "DC Plan") and 1993 Deferred Compensation Plan (the "1993 Plan") shall cease as of the Distribution Date. As of the Distribution Date, Shipbuilding Company shall assume the liability for the accounts of its Active Employees and Former Employees in the DC Plan and the 1993 Plan, Tenneco shall assume the liability for the accounts of the Active Employees and Former Employees of the Energy Group in the DC Plan and the 1993 Plan, and Industrial Company shall succeed to sponsorship of the 1993 Plan and the DC Plan and shall assume the liability for the accounts of the Active Employees and Former Employees of the Industrial Group in the DC Plan and the 1993 Plan. The total of each such Active Employee's or Former Employee's account in the DC Plan and the 1993 Plan as of the Distribution Date shall become the opening balance of such Active Employee's or Former Employee's account in a Nonqualified Deferred Compensation Plan created, as of the Distribution Date by either, (i) Tenneco, in the case of Active Employees and Former Employees of the Energy Group, or (ii) Shipbuilding Company, in the case of Active Employees or Former Employees of the Shipbuilding Group. Such opening balances shall become fully vested as of the close of business on the Distribution Date.

6.03. Tenneco Benefits Protection Program. Effective upon the Distribution Date, Shipbuilding Company and Tenneco shall each be released from any obligations which it may have under the Tenneco Benefits Protection Program. Neither Shipbuilding Company nor Tenneco shall be entitled to any portion of the Tenneco Inc. Benefit Protection Trust (the "Trust"), other than to the assets, if any, of the Trust allocable to the respective liabilities retained or assumed by them pursuant to this Agreement. Industrial Company shall continue to sponsor and maintain the Trust.

SECTION 6.04. Tenneco Options and Restricted Stock. Prior to the Distribution Date, Tenneco shall cause all outstanding restricted stock and performance share equivalent unit awards to become fully vested. Except as provided in the last sentence of this paragraph, the parties hereto shall cause all outstanding Tenneco stock options to be converted to options to acquire stock of Tenneco, Industrial Company or Shipbuilding Company in amounts and with exercise prices adjusted so that as to each grant the excess of the aggregate fair market value of the shares subject to the option immediately after the Distributions over the aggregate option price of such shares is not more than the excess of the aggregate fair market value of the shares subject to the option immediately before the Distributions over the aggregate option price of such shares. In all other respects, the options shall remain subject to the terms and conditions of the grants under which they were issued, conforming changes excepted. Except to the extent determined by the Compensation and Benefits Committee of Tenneco's Board of Directors, each grantee shall receive options with respect to the stock of the entity which employs him (or with which he is otherwise affiliated) immediately after the Distributions. If Tenneco has entered into a definitive agreement for a third-party to acquire Tenneco, the Tenneco stock options held by employees of the Energy Group shall not be treated as provided in the preceding portion of this Section 6.04; rather such options shall be made fully exercisable no less than 30 days prior to the closing date of such acquisition, and if such options are not exercised prior to the closing date, they will be cancelled effective as of the closing date.

SECTION 6.05. Employment Contracts. Tenneco shall retain and assume any and all contractual obligations to Messrs. Casey, Menikoff and Sinclair. Tenneco shall retain and assume any and all obligations to provide office space and secretarial help to Messrs. Keteisen and Scott. Industrial Company shall assume and discharge all supplemental pension obligations to Mr. Keteisen.

SECTION 7. Welfare Benefits.

7.01. Tenneco Salaried Welfare Plans. Effective on the Distribution Date, Tenneco and Shipbuilding Company shall each cease to be a sponsor of the Tenneco Salaried Welfare Plans, and Industrial Company shall

serve as the sponsor of the Tenneco Salaried Welfare Plans from and after the Distribution Date. If the Energy Group or the Shipbuilding Group adopt one or more welfare plans which is (are) identical to the comparable Tenneco Salaried Welfare Plan, the Industrial Company shall use its best efforts to administer such plan on behalf of the Energy Group or the Shipbuilding Group, as the case may be, for a period ending not later than December 31, 1997. Each of Shipbuilding Company and Tenneco hereby agrees to reimburse Industrial Company for all costs incurred by it with respect thereto.

7.02. Allocation and Discharge of Welfare Plan Liabilities. Shipbuilding Company shall retain and discharge all welfare plan liabilities with respect to Active Employees and Former Employees of the Shipbuilding Group and their dependents. Industrial Company shall retain and discharge all welfare plan liabilities with respect to Active Employees and Former Employees of the Industrial Group and their dependents. Tenneco shall retain and discharge all other welfare plan liabilities which remain after allocation of liabilities to Shipbuilding Company and Industrial Company under the two immediately preceding sentences, including, without limitation, all such liabilities relating to the Active Employees and Former Employees of the Energy Group and their dependents, and shall retain or have transferred to it all related assets allocable to such liabilities, including without limitation, the Tennessee Gas Pipeline Company Health Care Plan VEBA.

SECTION 8. General.

8.01. Post-Distribution Administration of Plans. The parties hereto agree to administer all plans consistently herewith, and to the extent necessary to amend plans accordingly.

8.02. Cost and Expenses. Each party shall bear all costs and expenses, including but not limited to legal and actuarial fees, incurred in the design, drafting and implementation of any and all plans and compensation structures which it enables or creates and the amendment of its existing plans or compensation structures.

SECTION 9. Miscellaneous.

9.01. Complete Agreement; Construction. This Agreement and the Distribution Agreement, shall constitute the entire agreement between the parties with respect to the subject matter hereof and shall supersede all previous negotiations, commitments and writings with respect to such subject matter. Notwithstanding any other provisions in this Agreement or the Distribution Agreement to the contrary, in the event and to the extent that there shall be a conflict between the provisions of this Agreement and the provisions of the Distribution Agreement or any other Ancillary Agreement, this Agreement shall control.

9.02. Other Ancillary Agreements. This Agreement is not intended to address, and should not be interpreted to address, the matters specifically and expressly covered by any of the other Ancillary Agreements.

9.03. Counterparts. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement, and shall become effective when one or more such counterparts have been signed by each of the parties and delivered to the other parties.

9.04. Survival of Agreements. Except as otherwise expressly provided herein, all covenants and agreements of the parties contained in this Agreement shall survive the Distribution Date.

9.05. Notices. All notices and other communications to a party hereunder shall be in writing and hand delivered or mailed by registered or certified mail (return receipt requested) or sent by any means of electronic message transmission with delivery confirmed (by voice or otherwise) to such party (and will be deemed given on the date on which the notice is received by such party) at the address for such party set forth below (or at such other address for the party as the party shall, from time to time, specify by like notice to the other parties):

If to Tenneco, at:

1010 Milam Street
Houston, Texas 77002
Attention: Corporate Secretary

If to Industrial Company, at: 1275 King Street
Greenwich, CT 06831
Attention: Corporate Secretary

If to Shipbuilding Company, at: 4101 Washington Avenue
Newport News, Virginia 23607
Attention: Corporate Secretary

9.06. Waivers. The failure of any party hereto to require strict performance by any other party of any provision in this Agreement will not waive or diminish that party's right to demand strict performance thereafter of that or any other provision hereof.

9.07. Amendments. This Agreement may not be modified or amended except by an agreement in writing signed by the parties hereto.

9.08. Assignment. This Agreement shall be assignable in whole in connection with a merger or consolidation or the sale of all or substantially all the assets of a party hereto so long as the resulting, surviving or transferee entity assumes all the obligations of the relevant party hereto by operation of law or pursuant to an agreement in form and substance reasonably satisfactory to the other parties to this Agreement. Otherwise this Agreement shall not be assignable, in whole or in part, directly or indirectly, by any party hereto without the prior written consent of the others, and any attempt to assign any rights or obligations arising under this Agreement without such consent shall be void.

9.09. Successors and Assigns. The provisions of this Agreement shall be binding upon, inure to the benefit of and be enforceable by the parties and their respective permitted successors and permitted assigns.

9.10. No Third Party Beneficiaries. This Agreement is solely for the benefit of the parties hereto and the members of their respective Groups and Affiliates, after giving effect to the Distributions, and should not be deemed to confer upon third parties any remedy, claim, liability, right of reimbursement, claim of action or other right in excess of those existing without reference to this Agreement.

9.11. Attorney Fees. A party in breach of this Agreement shall, on demand, indemnify and hold harmless the other parties hereto for and against all out-of-pocket expenses, including, without limitation, reasonable legal fees, incurred by such other party by reason of the enforcement and protection of its rights under this Agreement. The payment of such expenses is in addition to any other relief to which such other party may be entitled hereunder or otherwise.

9.12. Title and Headings. Titles and headings to sections herein are inserted for the convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

9.13. Governing Law. ALL QUESTIONS AND/OR DISPUTES CONCERNING THE CONSTRUCTION, VALIDITY AND INTERPRETATION OF THIS AGREEMENT AND THE EXHIBITS HERETO SHALL BE GOVERNED BY THE INTERNAL LAWS, AND NOT THE LAW OF CONFLICTS, OF THE STATE OF DELAWARE. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY AND UNCONDITIONALLY (i) AGREES TO BE SUBJECT TO, AND HEREBY CONSENTS AND SUBMITS TO, THE JURISDICTION OF THE COURTS OF THE STATE OF DELAWARE AND OF THE FEDERAL COURTS SITTING IN THE STATE OF DELAWARE, (ii) TO THE EXTENT SUCH PARTY IS NOT OTHERWISE SUBJECT TO SERVICE OF PROCESS IN THE STATE OF DELAWARE, HEREBY APPOINTS THE CORPORATION TRUST COMPANY, AS SUCH PARTY'S AGENT IN THE STATE OF DELAWARE FOR ACCEPTANCE OF LEGAL PROCESS AND (iii) AGREES THAT SERVICE MADE ON ANY SUCH AGENT SET FORTH IN (ii) ABOVE SHALL HAVE THE SAME LEGAL FORCE AND EFFECT AS IF SERVED UPON SUCH PARTY PERSONALLY WITHIN THE STATE OF DELAWARE.

9.14. Severability. In the event any one or more of the provisions contained in this Agreement should be held invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein and therein shall not in any way be affected or impaired thereby. The parties shall endeavor in good-faith negotiations to replace the invalid, illegal or unenforceable provisions with valid provisions, the economic effect of which comes as close as possible to that of the invalid, illegal or unenforceable provisions.

9.15. Subsidiaries. Each of the parties hereto shall cause to be performed, and hereby guarantee the performance of, all actions, agreements and obligations set forth herein to be performed by any Subsidiary of such party which is contemplated to be a Subsidiary of such party on and after the Distribution Date.

9.16. Release from Post Employment Liability. Tenneco hereby agrees that in the event it intends to request of any Energy Employee at any time on or within 5 years subsequent to the Effective Time any release of liability and further obligation on the part of Tenneco that it will promptly notify New Tenneco in writing of such intent and, if so requested by New Tenneco, in connection with such request also request from such Energy Employee a release of liability and further obligation on the part of New Tenneco either, at New Tenneco's election, (a) in the form provided to Tenneco by New Tenneco prior to the Effective Time, with such changes thereto as may subsequently be reasonably requested from time to time by New Tenneco, or (b) in substantially the same form as the release obtained from such Energy Employee by Tenneco.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

TENNECO INC.

By: _____

NEWPORT NEWS SHIPBUILDING INC.
(formerly known as Tenneco InterAmerica Inc.)

By: _____

NEW TENNECO INC.

By: _____

B

KM10000327

**EXHIBIT B
TO
DISTRIBUTION AGREEMENT
CORPORATE RESTRUCTURING TRANSACTIONS**

Set forth below are the transfers, distributions, contributions, assignments, conveyances and other transactions that, as applicable, the members of each of the Energy Group, Industrial Group and Shipbuilding Group shall consummate prior to the Distributions (the "*Corporate Restructuring Transactions*"). Each of Tenneco, Industrial Company and Shipbuilding Company hereby agrees to take all reasonable and appropriate action to consummate or to cause the consummation of each of the Corporate Restructuring Transactions prior to the Distributions and, as necessary, to cause any other member of the Energy Group, Industrial Group or Shipbuilding Group over which, at the time each such Corporate Restructuring Transaction is to be consummated, it has direct or indirect legal or effective control, to consummate such Corporate Restructuring Transactions prior to the Distributions and in the order set forth below. Capitalized terms used but not otherwise defined herein have the meaning ascribed to them under the Distribution Agreement.

1. Tennessee Gas Pipeline Company ("*TGP*") shall transfer and assign all of the assets and associated liabilities of and relating to the Walker muffler distribution warehouse center operation located in Carson, California (the "*MSDC Business*") to Tenneco Corporation as a contribution to capital.

2. Tenneco Corporation shall transfer and assign the MSDC Business to Industrial Company as a contribution to capital.

3. Tenneco Corporation shall effect the following transactions to satisfy the active trade or business requirement of Code Section 355(b).

a. TGP will transfer all of the stock of Midwestern Gas Transmission Company (Delaware) ("*Midwestern*") to Tenneco Corporation as a contribution to capital.

b. Tenneco Energy Resources Corporation (Delaware) ("*TERC*") will merge into Channel Industries Gas Company (Delaware) ("*CIGC*"), a wholly owned subsidiary of TERC, with CIGC as the surviving corporation.

c. Tenneco Corporation will transfer to New Midwestern Inc., a newly formed corporation, all of Tenneco Corporation's Energy Business assets other than stock of subsidiaries.

d. Tenneco Corporation will transfer to Midwestern as a contribution to capital all of the stock of the following companies:

Entrade Engine Company (Kentucky)

HT Gathering Company (Texas) (50%)¹

Petro-Tex Chemical Corporation (Delaware) (in dissolution)

SWL Security Corp. (Texas)

TGP Corporation (Delaware)

Tenneco Independent Power I Company (Delaware)

Tenneco Independent Power II Company (Delaware)

Tenneco Insurance Ventures Inc. (Delaware)

Tenneco Minerals Company—California (Delaware)

¹ Tenneco Corporation owns 50% of the issued and outstanding Class A Voting Stock and 20% of the Class B Nonvoting Stock, 29% of the total Equity; Houston Pipe Line Company, an unaffiliated company, owns 50% of the issued and outstanding Class A Voting Stock and 80% of the Class B Nonvoting Stock, 71% of the total equity.

Tenneco Minerals Company—Nevada (Delaware)
 Tenneco OCS Company, Inc. (Delaware)
 Tenneco Oil Company (Delaware)
 Tenneco Polymers, Inc. (Delaware)
 Tenneco Power Generation Company (Delaware)
 Tennessee Overthrust Gas Company (Delaware)
 New Midwestern Inc.

Alternatively, the stock of some of the above-listed companies may be transferred to CIGC as a contribution to capital in lieu of transferring the stock to Midwestern.

4. Tenneco will transfer all of its Energy Business assets (including the stock of Tenneco Credit Corporation, Tenneco MLP Inc. and Kern County Land Company) to TGP as a contribution to capital.

5. Newport News Industrial Corporation will transfer all of its assets and trade payables to Shipbuilding Company in exchange for a promissory note having a face amount and value equal to the net fair market value of the assets and liabilities transferred.

6. Tenneco Credit Corporation ("TCC") shall transfer and assign all of TCC's right, title and interest in and to a 95% interest as a limited partner in Counce Limited Partnership, a Texas Limited Partnership ("Counce"), to Tenneco Corporation in exchange and in consideration for Voting Preferred Stock of Tenneco Corporation having a fair market value equal to the aggregate appraised value of the partnership interest transferred by TCC.

7. Tenneco Equipment Corporation ("TEC") shall transfer and assign (a) all of TEC's shares of the Common Stock, \$0.01 par value, of Tenneco International Holding Corp. ("TIHC"), representing approximately 20.34% of all of the outstanding Common Stock of TIHC, and (b) all of TEC's shares of \$8.00 Junior Preferred Stock of TIHC, representing 50% of the total outstanding number shares of such \$8.00 Junior Preferred Stock to Tenneco Corporation in exchange and in consideration for Voting Preferred Stock of Tenneco Corporation having a fair market value equal to the aggregate appraised value of the stock transferred by TEC.

8. Tenneco International Inc. ("TII") shall transfer and assign all of TII's stock (100% unless otherwise indicated) in the following companies to Tenneco Corporation in exchange and in consideration for (a) a \$50,000 promissory note issued by Tenneco Corporation and (b) Voting Preferred Stock of Tenneco Corporation. The consideration issued by Tenneco Corporation shall have an aggregate fair market value equal to the aggregate appraised value of the stock of the following companies transferred by TII.

Autopartes Walker, S.A. de C.V. (Mexico) (0.02%)
 Omni-Pac GmbH (Germany) (1%)
 Omni-Pac S.A.R.L. (France) (97%)
 Tenneco Automotive Trading Company
 Tenneco International Holding Corp. (71.84% of Common Stock and 50% of \$8.00 Junior Preferred Stock)
 Tenneco United Kingdom Holdings Limited
 Walker Europe, Inc.
 Walker Norge A/S (Norway)

9. Shipbuilding Company will transfer its interest as a general partner in Counce Limited Partnership to PCA Leasing Company as a contribution to capital.

10. As further described and provided for under the Debt and Cash Allocation Agreement attached as Exhibit C to the Distribution Agreement, Shipbuilding Company shall issue debt to one or more third parties

and transfer the proceeds of the financing to Tenneco Corporation as a dividend. Tenneco Corporation will loan the funds received from Shipbuilding Company to Tenneco. Tenneco shall use all of the funds to retire existing debt (as contemplated under the Debt Realignment Plan) and to defray expenses related to the Transaction. Shipbuilding Company shall also transfer and assign the net intercompany receivable owed to the Shipbuilding Group by the Tenneco Group or the Industrial Group to Tenneco Corporation as a dividend.

11. Shipbuilding Company shall transfer and assign all of its shares of capital stock in Tenneco Packaging Inc. and PCA Leasing Company to Tenneco Corporation as a distribution with respect to stock.

12. Tenneco shall transfer and assign all of its ownership interest (100% unless otherwise indicated) in the following companies to TGP as a contribution to capital and in exchange and consideration for additional shares of stock of TGP.

- Autopartes Walker, S.A. de C.V. (0.02%)
- DeLine Box & Display, Inc.
- Tenneco Asia Inc.
- Tenneco Brazil Ltda. (Brazil)
- Tenneco Business Services Inc.
- Tenneco Foam Products Company (f/k/a Amoco Foam Products Company)
- Tenneco Texas Acquisition Inc.
- Tenneco Management Company (f/k/a 1275, Inc.)
- Tenneco Packaging Hungary Holdings Inc.
- Tenneco Romania Holdings Inc.

13. TGP shall transfer and assign all of the assets and related liabilities of the Walker Division (other than the MSDC Business) and all of the assets and liabilities of the Automotive Headquarters Division to Monroe Auto Equipment Company as a contribution to capital.

14. TGP shall assign and transfer all of its ownership interest (100% unless otherwise indicated) in the following entities to Tenneco Corporation as a contribution to capital and in exchange and consideration for additional shares of common stock of Tenneco Corporation.

- Autopartes Walker, S.A. de C.V. (Mexico) (99.94%)²
- Monroe Auto Equipment Company
- Monroe-Mexico S.A. de C.V. (Mexico) (0.01%)
- Provedora Walker S.A. de C.V. (Mexico) (99.99%)³
- Tenneco Automotive Foreign Sales Corporation Ltd. (Jamaica) (1%)
- Tenneco Brake, Inc.
- Walker Electronic Silencing, Inc.
- Walker Manufacturing Company

Stock Received in Step (12) above

- DeLine Box & Display, Inc.
- Tenneco Asia Inc.
- Tenneco Brazil Ltda. (Brazil)
- Tenneco Business Services Inc.
- Tenneco Foam Products Company (f/k/a Amoco Foam Products Company)
- Tenneco Texas Acquisition Inc.
- Tenneco Management Company (f/k/a 1275, Inc.)
- Tenneco Packaging Hungary Holdings Inc.
- Tenneco Romania Holdings Inc.

² Includes 0.02% interest acquired from Tenneco in step 12 above.

³ TGP owns 49,999 shares, and Monroe Auto Equipment Company owns 1 share.

15. Tenneco Corporation shall transfer and assign all of its ownership interest (100% unless otherwise indicated) in the following entities to Industrial Company as a contribution to capital and in exchange and consideration for additional shares of stock of Industrial Company.

Stock Owned at December 31, 1995

Tenneco Deutschland Holdinggesellschaft GmbH (Germany)
Walker Deutschland GmbH (Germany) (1%)

Stock and Partnership Interest Received In Steps (6)-(8) above

Counce Limited Partnership (95% limited partner interest)
Tenneco International Holding Corp. (100% of Common Stock and
100% of \$8.00 Junior Preferred Stock)
Omni-Pac GmbH (Germany) (1%)
Omni-Pac S.A.R.L. (France) (97%)
Tenneco Automotive Trading Company
Tenneco United Kingdom Holdings Limited
Walker Europe, Inc.
Walker Norge A/S (Norway)

Stock Received In Step (11) above

Tenneco Packaging Inc.
PCA Leasing Company

Stock Received In Step (14) above

Autopartes Walker, S.A. de C.V. (Mexico) (99.98%)*
Monroe Auto Equipment Company
Monroe-Mexico S.A. de C.V. (Mexico) (0.01%)
Provedora Walker S.A. de C.V. (Mexico) (99.99%)
Tenneco Automotive Foreign Sales Corporation Ltd. (Jamaica) (1%)
Tenneco Brake, Inc.
Walker Electronic Silencing, Inc.
Walker Manufacturing Company
DeLine Box & Display, Inc.
Tenneco Asia Inc.
Tenneco Brazil Ltda. (Brazil)
Tenneco Business Services Inc.
Tenneco Foam Products Company (f/k/a Amoco Foam Products Company)
Tenneco Texas Acquisition Inc.
Tenneco Management Company (f/k/a 1275, Inc.)
Tenneco Packaging Hungary Holdings Inc.
Tenneco Romania Holdings Inc.

16. Tenneco Corporation shall transfer and assign all of the stock of Shipbuilding Company and Industrial Company to TGP as a distribution with respect to stock.

* Includes: 0.02% interest owned by Tenneco Corporation at 12/31/95; 0.02% interest acquired from Tenneco International Inc.; and 99.94% interest acquired from TGP. Monroe Auto Equipment Company continues to own 0.02% of the stock.

17. TGP shall transfer and assign all of the stock of Shipbuilding Company and Industrial Company to Tenneco as a distribution with respect to stock.

18. Industrial Company shall transfer and assign the net intercompany receivable owed to the Industrial Group by the Tenneco Group to Tenneco as a dividend.

19. Eastern Insurance Company Limited (Bermuda) shall transfer and assign any of its assets and liabilities not related to the Energy Business to the appropriate Industrial Company or Shipbuilding Company.

20. TCC will sell most of the notes and accounts receivables purchased from Case Corporation, net of unearned finance charges and the allowance for doubtful accounts, to a third party. The remainder will be sold to Industrial Company. TCC will sell back to any Industrial Company or any Shipbuilding Company any third party notes or accounts receivables that were sold to TCC by such Subsidiary, net of unearned finance charges. TCC will sell to Industrial Company the loan to Tenneco International Holding Corp.

21. Industrial Company shall participate in the Debt Realignment pursuant to the terms of the Debt Realignment Plan.

22. To the extent not otherwise transferred to Industrial Company (or any other member of the Industrial Group) in any of the foregoing transactions, each of Tenneco, Shipbuilding Company and the other members of their respective Group shall transfer or cause to be transferred to Industrial Company (or any other member of the Industrial Group designated by Industrial Company), and Industrial Company (or such other member of the Industrial Group) shall accept and/or assume, the following assets and liabilities (to the extent of their interests therein or obligations thereunder):

a) Personal Property

1. Corporate aviation assets, including:

A. All fixed wing corporate aircraft (except the Gulfstream G-II, serial number 248, and Rolls Royce Spey Model 511-8 engines, manufacturer's Serial Numbers 9816 and 9844), and spare parts for the aircraft which as of the Effective Time will not have a net book value in excess of \$1 million.

B. Limited partner interest in the Waukegan Corporate Aviation Facilities, an Illinois limited partnership (which owns the Waukegan, Illinois airport hangar facility and common facilities), the stock of Corporate Hangar Services Inc., an Illinois corporation (which is the corporate general partner of Waukegan Corporate Aviation Facilities), and the sublease of the aviation facilities from Waukegan Corporate Aviation Facilities.

C. Certain furniture, fixtures, and equipment located in the Houston, Texas and Waukegan, Illinois hangar facilities which at the Effective Time will not have a net book value in excess of \$1 million.

2. Certain furniture, fixtures and equipment which as of the Effective Time will not have a net book value in excess of \$2 million located in:

A. Greenwich, Connecticut Management Center, including:

1. Furnishings
2. Computer equipment

B. Washington, D.C. office, including:

1. Furnishings
2. Computer equipment

C. Houston, Texas office, including:

1. Furnishings
2. Computer equipment

- b) Long term note receivable from Albright & Wilson, plc in the amount of \$7 million.
 - c) Liability for all vested accrued benefits for participants in the Tenneco Inc. Retirement Plan for Salaried Employees and the attendant assets.
 - d) All trademarks, trade names, service marks, company or operating unit names containing the word "Tenneco" or any variation of the name "Tenneco", such as those names with a "Tenn" or "Ten" syllable and respective applications or registrations therefor wherever used or registered, except that Tenneco and the other members of the Energy Group shall retain the right to use the name "Tennessee" in their respective corporate names or otherwise in respect of the Energy Business.
 - e) All other intellectual property that does not solely and directly relate to the Energy Business and/or the Shipbuilding Business, including but not limited to patents, copyrights, trademarks, service marks, tradenames, know-how, trade secrets, licenses and rights therein.
 - f) the insurance reserves and other liabilities, and the attendant assets, of Eastern Insurance that are related to the Industrial Business.
 - g) a \$20 million dividend paid by Eastern Insurance out of Eastern Insurance's capital surplus.
 - h) Transfer of "other reserves" in an amount not to exceed \$30 million.
 - i) Transfer recorded pre-distribution income tax assets and liabilities in accordance with the Tax Sharing Agreement.
23. To the extent not otherwise transferred to or retained by Tenneco (or any other member of the Energy Group) in any of (or after giving effect to) the foregoing transactions, each of Industrial Company, Shipbuilding Company and the other members of their respective Group shall transfer or cause to be transferred to Tenneco (or any other member of the Energy Group designated by Tenneco), and Tenneco (or such other member of the Energy Group) shall accept and/or assume, the following assets and liabilities (to the extent of their interests therein or obligations thereunder):
- a) Computer hardware previously transferred from Tenneco Energy and Tenneco Energy's share of software development costs incurred by Tenneco Business Services.
 - b) All prepaid or accrued insurance premiums related to Tenneco Energy.
24. Newport News Shipbuilding and Dry Dock Company ("NNSDD") shall assign and transfer to Industrial Company all of the stock of Tenneco Tanker Holdings Inc. in exchange and in consideration for an intercompany advance from Industrial Company.

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**EXHIBIT C
TO
DISTRIBUTION AGREEMENT**

DEBT AND CASH ALLOCATION AGREEMENT

THIS DEBT AND CASH ALLOCATION AGREEMENT (this "Agreement") is made and entered into as of this day of , 1996 by and among Tenneco Inc., a Delaware corporation ("Tenneco"), Newport News Shipbuilding Inc. (formerly known as Tenneco InterAmerica Inc.), a Delaware corporation ("Shipbuilding Company"), and New Tenneco Inc., a Delaware corporation ("Industrial Company").

WHEREAS, pursuant to the terms of that certain Distribution Agreement by and among the parties hereto and dated as of , 1996 (the "Distribution Agreement"), the parties have entered into this Agreement regarding the allocation of the Cash and Cash Equivalents and Consolidated Debt of Tenneco and its consolidated subsidiaries as of the Effective Time. For purposes of this Agreement only, the "Effective Time" means 12:01 AM, Houston time, on the date on which the Merger Effective Time occurs.

NOW, THEREFORE, in consideration of the mutual agreements, provisions and covenants contained in this Agreement and the Distribution Agreement, each of the parties hereto, on behalf of itself and each of the other members of its Group over which it has direct or indirect legal or effective control, hereby agrees as follows:

1. *Certain Definitions.* Capitalized terms which are used herein but which are not defined below in this Section 1 or in any of the other provisions or Sections of this Agreement or in the Distribution Agreement, shall have the meaning ascribed to such terms in the Debt Realignment Plan attached as Exhibit C to the Merger Agreement.

(a) "Actual Energy Debt Amount" means the aggregate amount, as of the Effective Time, of the following, without duplication:

(i) the then outstanding amount of the Tenneco Revolving Debt plus accrued and accreted interest and fees and expenses in respect thereof (as reflected on the Energy Adjusted Closing Balance Sheet); plus

(ii) the Consolidated Public Debt Value; plus

(iii) the then outstanding principal amount of Consolidated Debt of Tenneco and the Energy Subsidiaries other than that which is described in clauses (i) and (ii) above (for this purpose undrawn letters of credit and guarantees shall not be treated as outstanding) plus accrued and accreted interest and fees and expenses in respect thereof as reflected on the Energy Adjusted Closing Balance Sheet; plus

(iv) except as otherwise expressly provided in the Merger Agreement or the Distribution Agreement, the unpaid amount of all direct and out of pocket fees, costs and expenses (as reflected on the Energy Adjusted Closing Balance Sheet) incurred on or prior to the Effective Time by Tenneco and its subsidiaries in respect of the transactions contemplated under the Debt Realignment, with respect to the Merger Agreement, the NPS Issuance and with respect to the Distribution Agreement, including, without limitation, the Corporate Restructuring Transactions, the Distributions, the Merger and the other related transactions, including by way of example items specifically set forth on Schedule I to the extent incurred in respect of the aforesaid transactions (collectively, the "Tenneco Transaction Expenses");

(v) any sales and use, gross receipts or other transfer Taxes (including Gains Taxes and Transfer Taxes, as defined in the Merger Agreement) imposed as a result of the Corporate Restructuring Transactions or otherwise occurring pursuant to the Distribution Agreement or the Merger Agreement, excluding, however, any stamp duty imposed by the Stamp Act 1894 (Queensland) as a result of the Merger; plus

(vi) Restructuring Taxes (as defined in the Tax Sharing Agreement), except (A) for Taxes resulting from the deferred intercompany items on Schedule 2, and (B) to the extent the IRS ruling provides the Transactions (as defined in the Tax Sharing Agreement) are tax-free; plus

(vii) the then outstanding amount of any off-balance sheet indebtedness incurred after June 19, 1996 and before the Effective Time to finance the acquisition of any additional interest in the Oasis Pipeline;

(viii) dividends declared by Tenneco on its common stock, \$4.50 Preferred Stock and \$7.40 Preferred Stock which have not been paid prior to the Effective Time but as to which the record date is before the Effective Time; plus

(ix) the total amount of dividends accrued on the shares of New Preferred Stock issued pursuant to the NPS Issuance that remain unpaid as of the Effective Time.

The parties hereto hereby acknowledge and agree that the Actual Energy Debt Amount shall include any amounts (including interest, fees and other charges) that may be due and owing ASCC under or as a result of the factoring arrangement between ASCC and Tenneco (and/or any of its Subsidiaries) other than the amount of Factored Proceeds (the "ASCC Amount").

(b) "*Actual Energy Expenditures Amount*" means the actual amount of capital expenditures (determined on a basis consistent with the past accounting practices of the Energy Business and the 1996 capital budget provided to Acquiror) made and paid for by the Energy Business from and after January 1, 1996 to and including the Effective Time, including, without limitation any capital expenditures in respect of the 70 MW Dunaferr power project in Hungary; provided, however, that any amount paid for the acquisition of any additional interest in either Tenneco Energy Resources Inc. or the Oasis Pipeline or to repair any gas pipeline shall not be capital expenditures for any purpose under this Agreement and shall not be included in the Actual Energy Expenditures Amount.

(c) "*Allocated Energy Debt*" means the total amount of indebtedness (including accrued and accreted interest and fees and expenses) outstanding as of the Effective Time under each of the Tenneco Revolving Debt, the Consolidated Debt (other than the Tenneco Revolving Debt) of Tenneco and the Energy Subsidiaries and the Tenneco Transaction Expenses, and any and all such indebtedness outstanding or other obligations and liabilities incurred or accrued under any of the foregoing from time to time and at any time after the Effective Time.

(d) "*Allocated Industrial Debt*" means the total amount of indebtedness (including accrued and accreted interest and fees and expenses) outstanding under the Industrial Debt Securities as of the Effective Time, any and all such indebtedness outstanding from time to time thereafter and all other obligations and liabilities incurred or accrued at any time under the Industrial Debt Securities.

(e) "*Allocated Shipbuilding Debt*" means the total amount of indebtedness (including accrued and accreted interest and fees and expenses) outstanding under the Shipbuilding Credit Facility as of the Effective Time, any and all such indebtedness outstanding from time to time at any time thereafter and all other obligations and liabilities incurred or accrued at any time under the Shipbuilding Credit Facility.

(f) "*Auditors*" has the meaning ascribed to such term in Section 6 below.

(g) "*Base Amount*" means an amount equal to \$2,650,000,000, (i) plus, without duplication, the sum of (A) with respect to Tenneco gas purchase contracts, the amount of all cash payments made by Tenneco and/or any of its Subsidiaries during the period commencing on the date of Merger Agreement and ending as of the Effective Time as a result or in respect of any settlement, judgment or satisfaction of a bond in excess of the market price for gas received by Tenneco and/or any of its Subsidiaries reduced by the amount of any cash payments received from customers, insurers or other third parties with respect thereto (other than ones refunded prior to the Effective Time) or with respect to any gas supply realignment costs which are so recovered (and not refunded) on or prior to the Effective Time, (B) the purchase price paid by Tenneco and/or any of its subsidiaries to acquire any additional interest in the Oasis Pipeline, (C) the amount of all cash payments made by Tenneco and/or any of the Energy Subsidiaries during the period commencing on the date of the Merger Agreement and ending on the Closing Date in settlement of any significant claim, action, suit or proceeding to the extent such matter would be an Energy Liability and with the consent of Acquiror, which shall not be arbitrarily withheld (including, without limitation, cash

payments in settlement of claims against Tenneco and/or any of its affiliates arising from the Stock Purchase Agreement dated as of July 31, 1986 by and between Tenneco Inc. and L.C.H. Corporation) reduced by the amount of any cash payments received by Tenneco or any of the Energy Subsidiaries during such period from customers, insurers or other third parties with respect thereto, and (D) the total amount of the specific additions or increases to the Base Amount set forth on Schedule 4 attached hereto, (ii) less, without duplication, the sum of (A) the gross amount of cash proceeds from the NPS Issuance (as defined in the Merger Agreement) less the amount of any expenses, fees or other out-of-pocket costs related thereto which are included in the Actual Energy Debt Amount), and (B) the total amount of the specific subtractions and reductions to the Base Amount set forth on Schedule 4 attached hereto.

(h) "*Cash and Cash Equivalents*" has the meaning ascribed to such term under United States generally accepted accounting principles; provided, that in all events checks issued by Tenneco and the Energy Subsidiaries which remain unpaid as of the Effective Time shall be deducted from Cash and Cash Equivalents, and checks received by Tenneco and the Energy Subsidiaries which remain uncollected prior to the Effective Time (other than checks that have been dishonored) shall be included in Cash and Cash Equivalents.

(i) "*Consolidated Public Debt Value*" means the value (including any accrued and unpaid interest thereon) of publicly-held Consolidated Debt of Tenneco and the Energy Subsidiaries outstanding as of the Effective Time (as reflected on the Energy Adjusted Closing Balance Sheet), calculated and determined by Tenneco and Acquiror or if, they are unable to agree, by a nationally recognized investment banking firm selected by mutual agreement between Tenneco and Acquiror, as of the close of business on the fifth (5th) business day preceding the Effective Time based on the applicable spreads to treasuries and the applicable benchmark treasury securities listed on Schedule 3.

(j) "*Closing Calendar Month*" means the calendar month in which the Effective Time occurs.

(k) "*Debt Realignment*" has the meaning ascribed to such term in the Merger Agreement.

(l) "*Dispute*" has the meaning ascribed to such term in Section 6 below.

(m) "*Energy Adjusted Closing Balance Sheet*" has the meaning ascribed to such term in Section 6 below.

(n) "*Energy Closing Balance Sheet*" has the meaning ascribed to such term in Section 6 below.

(o) "*Energy Receivables*" means any and all accounts receivable of the Energy Business (after giving effect to the Corporate Restructuring Transactions and the Distributions and, therefore, specifically excluding receivables relating to the business of Case Corporation and the Industrial Business).

(p) "*Factored Proceeds*" means the total amount of outstanding cash proceeds received by Tenneco from ASCC, as of the last business day of the month preceding the Closing Calendar Month, through the factoring of Energy Receivables, which amount shall not exceed \$100,000,000.

(q) "*Guaranteed Energy Cash Amount*" has the meaning ascribed to such term in Section 5 below.

(r) "*Guaranteed Shipbuilding Cash Amount*" has the meaning ascribed to such term in Section 5 below.

(s) "*Independent Auditors*" has the meaning ascribed to such term in Section 6 below.

(t) "*Industrial Debt Securities*" means, collectively, the notes, debentures and other debt securities issued by Industrial Company in exchange for certain issues of the Consolidated Debt pursuant to and in accordance with the debt exchange by Industrial Company contemplated under the Debt Realignment.

(u) "*Merger Agreement*" means the Amended and Restated Agreement and Plan of Merger, dated as of June 19, 1996, among Tenneco, El Paso Natural Gas Company and El Paso Merger Company, as amended from time to time.

(v) "*Merger Closing Date*" means the date on which the Merger is consummated.

(w) *"Required Energy Expenditures Amount"* means an aggregate amount of capital expenditures (determined on a basis consistent with the past accounting practices of the Energy Business and the 1996 capital budget provided to Acquiror) by the Energy Business for 1996 equal to \$333,200,000, plus an amount of capital expenditures by the Energy Business for 1997 equal to \$27,750,000 per month for each month (or pro rata portion thereof) from January 1, 1997 to the Effective Time.

(x) *"Shipbuilding Adjusted Closing Balance Sheet"* has the meaning ascribed to such term in Section 6 below.

(y) *"Shipbuilding Closing Balance Sheet"* has the meaning ascribed to such term in Section 6 below.

(z) *"Shipbuilding Credit Facility"* has the meaning ascribed to such term in Section 3 below.

(aa) *"Tenneco Allocation Percentage"* means a fraction, the numerator of which is the total number of business days remaining in the Closing Calendar Month from and after the Effective Time (including the day on which the Effective Time occurs), and the denominator of which is the total number of business days in the Closing Calendar Month.

(bb) *"Tenneco Revolving Debt"* has the meaning ascribed to such term in Section 2 below.

2. *Tenneco Credit Facility and Tenneco Revolving Debt.* Tenneco shall, at its expense, have the sole right and authority to, and will use its commercially reasonable efforts to, have in place prior to the Distribution Date a credit facility for itself (with such guarantees of its obligations thereunder by the Energy Subsidiaries as it deems necessary) in an aggregate principal amount sufficient (together with other available funds to Tenneco) to fund the tenders, redemptions, prepayments, defeasances and maturities contemplated under the Debt Realignment; to pay all the fees, costs and expenses incurred by Tenneco and its subsidiaries in preparing for, negotiating and effecting the Distributions, the Merger and the Debt Realignment and any financings in connection therewith; and for other general corporate purposes (including, without limitation, working capital, the repayment or refinancing of Consolidated Debt and the payments of dividends). This facility shall be in effect at, and shall have a remaining stated maturity of at least 180 days following, the closing of the Merger and the Distributions. The aggregate amount of debt (including accrued and accreted interest and fees and expenses) outstanding as of the Effective Time under this facility is hereinafter called the *"Tenneco Revolving Debt"*.

Notwithstanding anything contained herein, (a) contemporaneously with the Distributions, Tenneco and the Energy Subsidiaries shall be removed as obligor under (and released from liability with respect to) any indebtedness for borrowed money for which Tenneco or its subsidiaries are liable and which are assumed by the Industrial Company or the Shipbuilding Company pursuant to the terms hereof and the Distribution Agreement, (b) any Tenneco Revolving Debt shall be prepayable without penalty, subject to customary notice provisions, (c) in respect of publicly-traded Consolidated Debt, between the date of the Merger Agreement and the Effective Time there shall be no (i) extension of maturity or average life, (ii) increase in interest rates or (iii) adverse change in defeasance or redemption provisions with respect to any indebtedness for borrowed money for which Tenneco or the Energy Subsidiaries will be liable on or after the Effective Time and (d) except for the Tenneco Revolving Debt, no indebtedness for borrowed money of Tenneco or the Energy Subsidiaries at the Effective Time shall contain any affirmative or negative financial or operational covenants other than ones that are (x) mutually acceptable to Tenneco and Acquiror or (y) no more restrictive in the aggregate and substantially equivalent to those set forth in the Indenture dated as of January 1, 1992 of El Paso Natural Gas Company as in effect as of the date of the Merger Agreement (other than Section 10.05 of the Indenture).

3. *Shipbuilding Credit Facility and Shipbuilding Revolving Debt.* Prior to the Distributions (and at such time as Tenneco shall request), Shipbuilding Company shall, at its expense, obtain and have in place a credit facility (the *"Shipbuilding Credit Facility"*) for itself (with such guarantees of its obligations thereunder by the Shipbuilding Subsidiaries as is necessary to obtain the Shipbuilding Credit Facility) in an aggregate principal amount of at least \$600 million (the *"Minimum Debt Amount"*) and shall borrow the Minimum Debt Amount thereunder and distribute the proceeds of such borrowing to Tenneco (or such subsidiary of Tenneco as Tenneco shall designate) at such time on or prior to the consummation of the Distributions as Tenneco shall request.

4. Allocation and Assumption of Debt.

(a) *Allocated Energy Debt.* On the Distribution Date, Tenneco shall assume, and shall thereafter be solely liable and responsible for, the Allocated Energy Debt. Tenneco hereby acknowledges and agrees that the Allocated Energy Debt shall constitute an Energy Group Liability as defined in the Distribution Agreement.

(b) *Allocated Industrial Debt.* On the Distribution Date, Industrial Company shall assume, and shall thereafter be solely liable and responsible for, the Allocated Industrial Debt. Industrial Company hereby acknowledges and agrees that the Allocated Industrial Debt shall constitute an Industrial Group Liability as defined in the Distribution Agreement.

(c) *Allocated Shipbuilding Debt.* On the Distribution Date, Shipbuilding Company shall assume, and shall thereafter be solely liable and responsible for, the Allocated Shipbuilding Debt. Shipbuilding Company hereby acknowledges and agrees that the Allocated Shipbuilding Debt shall constitute a Shipbuilding Group Liability as defined in the Distribution Agreement.

5. *Allocation of Cash and Cash Equivalents.* Prior to or contemporaneously with the consummation of the Distributions, each of the parties hereto shall make such transfers of the Cash and Cash Equivalents of Tenneco and its consolidated subsidiaries (prior to giving effect to the Distributions) so that to the extent possible, based on estimates of the aggregate amount of Cash and Cash Equivalents of Tenneco and its consolidated subsidiaries then on hand, (a) Tenneco and the Energy Subsidiaries, on a consolidated basis, shall, as of the Effective Time, have an aggregate amount of Cash and Cash Equivalents equal to the sum of the following:

(i) \$25.0 million,

(ii) the product of (A) the Tenneco Allocation Percentage, and (B) the lesser of (I) \$100 million and (II) the total amount of the Factored Proceeds (the lesser of such amounts being referred to as the "Section 5 Amount") and

(iii) should the Effective Time occur after the day of the month on which Tenneco generally collects receivables from customers of its regulated pipeline business (typically, the 25th day of a month), the lesser of the amount of (A) the Section 5 Amount owing to ASCC as of the Effective Time, and (B) the total amount of such receivables actually collected by Tenneco or any of its Subsidiaries during the period beginning on the day such receivables are first collected and ending at the Effective Time (the "Actual Collection Amount"), so long as that amount is owing to ASCC as of the Effective Time. It is expressly understood that as of the Effective Time all payables and receivables are for the account of Acquiror.

(the sum of the amounts described in the immediately preceding clause (i), (ii) and (iii) is hereinafter, referred to as the "Guaranteed Energy Cash Amount"), and (b) Shipbuilding Company and the Shipbuilding Subsidiaries, on a consolidated basis, shall, as of the close of business on the Merger Closing Date, have an aggregate of \$5 million of Cash and Cash Equivalents (the "Guaranteed Shipbuilding Cash Amount"). All remaining Cash and Cash Equivalents of Tenneco and its consolidated subsidiaries shall be allocated to Industrial Company and the Industrial Subsidiaries.

6. Post Distribution Audit.

(a) *Preparation of Closing Balance Sheets.* As soon as practicable after the Merger Closing Date, but in any event within 60 days following the Merger Closing Date, Industrial Company shall cause Arthur Andersen LLP (the "Auditors") to:

(i) conduct an audit of Tenneco and the Energy Subsidiaries to determine the aggregate amount, as of the Effective Time, of each of the Factored Proceeds, the Section 5 Amount, the Actual Collection Amount, the Tenneco Revolving Debt, the Consolidated Debt (other than the Tenneco Revolving Debt) of Tenneco and the Energy Subsidiaries, the Tenneco Transaction Expenses, the Cash and Cash Equivalents of Tenneco

and the Energy Subsidiaries and the Actual Energy Expenditures Amount, and to prepare and deliver to each of Industrial Company and Tenneco a consolidated balance sheet for Tenneco and the Energy Subsidiaries as of the Effective Time reflecting (x) the amount of each of the foregoing (other than the aggregate amount of the Factored Proceeds, the Section 5 Amount, the Actual Collection Amount (which shall be set forth in a footnote to such consolidated balance sheet) and the Consolidated Debt valued as part of the Consolidated Public Debt Value) and (y) the Consolidated Public Debt Value (the "*Energy Closing Balance Sheet*"); and

(ii) conduct an audit of Shipbuilding Company and the Shipbuilding Subsidiaries to determine the aggregate amount of the Cash and Cash Equivalents of Shipbuilding Company and the Shipbuilding Subsidiaries as of the Effective Time, and to prepare and deliver to each of Industrial Company and Shipbuilding Company a consolidated balance sheet for Shipbuilding Company and the Shipbuilding Subsidiaries as of the Effective Time reflecting the aggregate amount of such Cash and Cash Equivalents (the "*Shipbuilding Closing Balance Sheet*").

The Energy Closing Balance Sheet and the Shipbuilding Closing Balance Sheet shall each be prepared on the basis of an audit conducted by the Auditors in accordance with generally accepted auditing standards and prepared in accordance with generally accepted accounting principles consistently applied and without giving effect to any change in accounting principles required on account of the consummation of the Merger or the Distributions, except that, to the extent that any definition contained herein contemplates inclusion or exclusion of an item that would not be included or excluded under generally accepted accounting principles, the Auditors shall compute such item in accordance with such definition. During the course of the preparation of the Energy Closing Balance Sheet and the Shipbuilding Closing Balance Sheet by the Auditors, and during any period in which there is a dispute regarding either the Energy Closing Balance Sheet or the Shipbuilding Closing Balance Sheet, each of Tenneco, Industrial Company and Shipbuilding Company, as the case may be, shall cooperate with the Auditors and each other and shall have access to all work papers of the Auditors and all pertinent accounting and other records of Tenneco and the Energy Subsidiaries and Shipbuilding Company and the Shipbuilding Subsidiaries, as applicable. Tenneco shall pay the fees and expenses of the Auditors. Notwithstanding any provision of this Agreement or the Distribution Agreement, the Claims Deposit (as defined in Insurance Agreement) shall not be included as Cash and Cash Equivalents of Tenneco and the Energy Subsidiaries.

(b) *Disputes Regarding Closing Balance Sheet.* Unless (i) in the case of the Energy Closing Balance Sheet, Tenneco delivers written notice to Industrial Company on or prior to the 30th day after its receipt of the Energy Closing Balance Sheet that it disputes any of the amounts set forth on the Energy Closing Balance Sheet (hereinafter, an "*Energy Dispute*"), or (ii) in the case of the Shipbuilding Closing Balance Sheet, Shipbuilding Company delivers written notice to Industrial Company on or prior to the 30th day after its receipt of the Shipbuilding Closing Balance Sheet that it disputes the amount of Cash and Cash Equivalents set forth on the Shipbuilding Closing Balance Sheet (hereinafter, a "*Shipbuilding Dispute*") then, as applicable, Tenneco and/or Shipbuilding Company shall be deemed to have accepted and agreed to the Energy Closing Balance Sheet or the Shipbuilding Closing Balance Sheet, as applicable, in the form in which it was delivered to it by the Auditors. If such a notice of an Energy Dispute is given by Tenneco or a notice of a Shipbuilding Dispute is given by Shipbuilding Company (in either case such party being hereinafter referred to as the "*Disputing Party*") within such 30-day period, then Industrial Company and the Disputing Party shall, within 15 days after the giving of any such notice, attempt to resolve such Energy Dispute or Shipbuilding Dispute, as the case may be, and agree in writing upon the final content of the Energy Closing Balance Sheet or Shipbuilding Closing Balance Sheet, as the case may be. In the event that the Disputing Party and Industrial Company are unable to resolve any Energy Dispute or Shipbuilding Dispute, as the case may be, within such 15-day period, then the certified public accounting firm of Ernst & Young or another mutually acceptable independent accounting firm (the "*Independent Auditors*") shall be employed as arbitrator hereunder to settle such Energy Dispute and/or Shipbuilding Dispute, as the case may be, as soon as practicable. The Independent Auditors shall have access to all documents and facilities necessary to perform its function as arbitrator. The determination of the Independent Auditors with respect to any Energy Dispute and/or Shipbuilding Dispute, as the case may be, shall be final and binding on the applicable parties hereto. Industrial Company and the Disputing Party shall each pay one-half (½) of the fees and expenses of the Independent Auditors for such services. Industrial Company and the

Disputing Party each agree to execute, if requested by the Independent Auditors, a reasonable engagement letter. The term "*Energy Adjusted Closing Balance Sheet*," as used herein, shall mean the definitive Energy Closing Balance Sheet agreed to by Tenneco and Industrial Company or, as the case may be, the definitive Energy Closing Balance Sheet resulting from the determinations made by the Independent Auditors in accordance with this Section 6(b) (in addition to the matters theretofore agreed to by Tenneco and Industrial Company). The term "*Shipbuilding Closing Balance Sheet*," as used herein, shall mean the definitive Shipbuilding Closing Balance Sheet agreed to by Shipbuilding Company and Industrial Company or, as the case may be, the definitive Shipbuilding Closing Balance Sheet resulting from the determinations made by the Independent Auditors in accordance with this Section 6(b) (in addition to the matters theretofore agreed to by Shipbuilding Company and Industrial Company). The date on which the Energy Adjusted Closing Balance Sheet is determined and provided to each of Industrial Company and Tenneco pursuant to this Section 6(b) is hereinafter referred to as the "*Energy Determination Date*". The date on which the Shipbuilding Adjusted Closing Balance Sheet is determined and provided to each of Industrial Company and Shipbuilding Company pursuant to this Section 6(b) is hereinafter referred to as the "*Shipbuilding Determination Date*".

7. Post Distribution Adjustments and Cash Payments.

(a) *Adjustments and Payments Relating to Consolidated Debt.* If the Actual Energy Debt Amount exceeds the Base Amount, Industrial Company shall pay Tenneco the amount of such excess in cash within 10 days after the Energy Determination Date. If, on the other hand, the Actual Energy Debt Amount is less than the Base Amount, Tenneco shall pay Industrial Company the amount of such deficiency in cash within 10 days after the Energy Determination Date.

(b) *Adjustments and Payments Relating to Cash and Cash Equivalents.*

(i) *Adjustments and Payments Relating to Shipbuilding Company.* If the amount of Cash and Cash Equivalents of Shipbuilding Company and the Shipbuilding Subsidiaries as reflected on the Shipbuilding Adjusted Closing Balance Sheet is less than the Guaranteed Shipbuilding Cash Amount, Industrial Company shall pay Shipbuilding Company the amount of such deficiency in cash within 10 days after the Shipbuilding Determination Date. If, on the other hand, the amount of Cash and Cash Equivalents of Shipbuilding Company and the Shipbuilding Subsidiaries as reflected on the Shipbuilding Adjusted Closing Balance Sheet exceeds the Guaranteed Shipbuilding Cash Amount, Shipbuilding shall pay Industrial Company the amount of such excess in cash within 10 days after the Shipbuilding Determination Date.

(ii) *Adjustments and Payments Relating to Tenneco.* (A) If the amount of Cash and Cash Equivalents of Tenneco and the Energy Subsidiaries as reflected on the Energy Adjusted Closing Balance Sheet is less than the Guaranteed Energy Cash Amount, Industrial Company shall pay Tenneco the amount of such deficiency in cash within 10 days after the Energy Determination Date. If, on the other hand, the amount of Cash and Cash Equivalents of Tenneco and the Energy Subsidiaries as reflected on the Energy Adjusted Closing Balance Sheet exceeds the Guaranteed Energy Cash Amount, Tenneco shall pay Industrial Company the amount of such excess in cash within 10 days after the Energy Determination Date.

(B) If the Actual Energy Expenditures Amount as reflected on the Energy Adjusted Closing Balance Sheet is less than the Required Energy Expenditures Amount, Industrial Company shall pay Tenneco the amount of such deficiency in cash within 10 days after the Energy Determination Date. If, on the other hand, the Actual Energy Expenditures Amount as reflected on the Energy Adjusted Closing Balance Sheet is greater than the Required Energy Expenditures Amount, Tenneco shall pay to Industrial Company the amount of such excess in cash within 10 days after the Energy Determination Date.

(C) Each of Tenneco and Industrial Company hereby agrees that the amount of any cash payment otherwise due it under any provision of this Section 7 may be offset against and reduced, on a dollar for dollar basis, in respect of any cash payment it may otherwise be required to make to the other pursuant to and in accordance with any other provision of this Section 7, and that the amount of such offset and reduction shall be treated as payment of its obligations under any provision of this Section 7 to the extent of such offset and reduction.

8. Miscellaneous Provisions.

(a) *Termination.* This Agreement may not be terminated except upon the written agreement of each of the parties hereto.

(b) *Best Efforts.* If at any time after the Merger Closing Date any further action is necessary or desirable to carry out the purposes of this Agreement, each of Tenneco, Industrial Company and Shipbuilding Company shall, on the written request of any of them, take (or cause the appropriate member of its Group over which it has direct or indirect legal or effective control to take) all such reasonably necessary or desirable action.

(c) *Cooperation.* The parties hereto agree to use their reasonable best efforts to cooperate with respect to the various matters contemplated by this Agreement.

(d) *Successors and Assigns.* Except as otherwise expressly provided herein, no party hereto may assign or delegate, whether by operation of law or otherwise, any of such party's rights or obligations under or in connection with this Agreement without the written consent of each other party hereto. No assignment will, however, release the assignor of any of its obligations under this Agreement or waive or release any right or remedy the other parties may have against such assignor hereunder. Except as otherwise expressly provided herein, all covenants and agreements contained in this Agreement by or on behalf of any of the parties hereto will be binding upon and enforceable against the respective successors and assigns of such party and will be enforceable by and will inure to the benefit of the respective successors and permitted assigns of such party.

(e) *Modification; Waiver; Severability.* This Agreement may not be amended or modified except in a writing executed by each of the parties hereto. The failure by any party to exercise or a delay in exercising any right provided for herein shall not be deemed a waiver of any right hereunder. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement.

(f) *Counterparts.* This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which taken together shall constitute one and the same Agreement.

(g) *Descriptive Headings.* The descriptive headings of this Agreement are inserted for convenience only and do not constitute a part of this Agreement.

(h) *Notices.* All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when delivered personally or five business days after mailing by certified or registered mail, return receipt requested and postage prepaid, to the recipient at such recipient's address as indicated in the Distribution Agreement or to such other address or to the attention of such other person as the recipient party has specified by prior written notice to the sending party.

(i) *Survival.* Each of the agreements of the parties herein shall survive the Merger Closing Date.

(j) *No Third Party Beneficiaries.* This Agreement is made solely for the benefit of the parties hereto and the other members of their respective Groups, and shall not give rise to any rights of any kind to any other third parties.

(k) *Governing Law and Consent to Jurisdiction.* ALL QUESTIONS AND/OR DISPUTES CONCERNING THE CONSTRUCTION, VALIDITY AND INTERPRETATION OF THIS AGREEMENT AND THE SCHEDULES AND EXHIBITS HERETO SHALL BE GOVERNED BY THE INTERNAL LAWS, AND NOT THE LAW OF CONFLICTS, OF THE STATE OF DELAWARE. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY AND UNCONDITIONALLY AGREES TO BE SUBJECT TO, AND HEREBY CONSENTS AND SUBMITS TO, THE JURISDICTION OF THE COURTS OF THE STATE OF DELAWARE AND OF THE FEDERAL COURTS SITTING IN THE STATE OF DELAWARE.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first above written.

TENNECO INC.

By _____
Name:
Title:

NEW TENNECO INC.

By _____
Name:
Title:

NEWPORT NEWS SHIPBUILDING INC.
(formerly known as Tenneco InterAmerica Inc.)

By _____
Name:
Title:

**Schedule 1
to Debt and Cash Allocation Agreement**

Accounting fees and expenses

Actuarial fees and expenses

Appraisal fees and expenses

Audit fees and expenses

Broker/dealer fees and expenses

Consulting fees and expenses

Exchange/paying agent fees and expenses

Exit consent fees

Fees and expenses incurred in connection with arranging the Revolving Debt, including commitment fees, drawdown fees, agent's fees, facility fees and similar fees and expenses, and lender's costs and expenses payable by the borrower

Filing fees, including SEC, NYSE, NASD, HSR and other similar fees

Information agent fees and expenses

Investment banking fees and expenses, dealer manager fees and expenses, and similar fees and expenses

Fees and expenses with respect to legal matters pertaining to the transactions

Mailing expenses

Newspaper advertising costs

Printing fees and expenses

Proxy solicitation fees and expenses

Soliciting dealer fees and expenses

Rating Agency fees

Underwriting, placement, registration and similar fees, commissions and discounts payable in connection with the NPS Preferred Stock

Schedule 2
to Debt and Cash Allocation Agreement

The deferred intercompany items referred to in Section 1(a)(vi) of the Debt and Cash Allocation agreement are the following intercompany transactions

<u>Seller</u>	<u>Buyer</u>	<u>Property Transferred</u>
Tenneco Corporation	Tenneco Inc.	Stock of Kern County Land Co.
Tenneco Corporation	Tenneco Inc.	Stock of Tenneco Credit Corp.
Tenneco Corporation	Tennessee Gas Pipeline Co.	Stock of Tenneco International Inc.
Channel Gas Marketing	Channel Industries Gas	DT Line
Tenngasco Gas Supply	Channel Industries Gas	Transmission facilities
Tennessee Gas Pipeline Co.	Energy TRACS	Software assignment agreement

TENNECO INC.

Schedule 3

Security Description				Pre-Determined			
				Benchmark Treasury		Spread to Treasury(1)	
Indenture	Face	Coupon	Maturity	Coupon	Maturity	Case A	Case B
Inc.	\$300.0	6.500%	12/15/05	5.875%	11/05	84 bp	76 bp
Inc.	300.0	7.250%	12/15/25	pricing 30yr UST		125	113
Inc.	500.0	7.875%	10/01/02	6.375%	08/02	73	66
Inc.	250.0	8.000%	11/15/99	7.750%	11/99	58	52
Inc.	150.0	9.000%	11/15/12	pricing 30yr UST		95	86
Inc.	200.0	9.875%	02/01/01	7.750%	02/01	66	59
Inc.	250.0	10.000%	03/15/08	pricing 30yr UST		91	82
Inc.	500.0	10.000%	08/01/98	5.875%	08/98	51	46
Inc.	175.0	10.375%	11/15/00	5.625%	11/00	64	58
TGP	400.0	6.000%	12/15/11	pricing 30yr UST		95	86
TGP	75.0	8.000%	05/15/97	NA	NA	NA	NA
TGP	250.0	9.000%	01/15/97	NA	NA	NA	NA
TCC	7.5	8.500%	01/30/97	NA	NA	NA	NA
TCC	0.5	8.500%	03/17/97	NA	NA	NA	NA
TCC	3.0	8.500%	03/24/97	NA	NA	NA	NA
TCC	5.0	8.520%	03/28/97	NA	NA	NA	NA
TCC	6.6	8.570%	03/18/97	NA	NA	NA	NA
TCC	150.0	9.250%	11/01/96	NA	NA	NA	NA
TCC	12.0	9.470%	09/21/98	5.875%	08/98	48	43
TCC	10.0	9.480%	01/28/02	7.500%	11/01	69	62
TCC	250.0	9.625%	08/15/01	7.875%	08/01	68	61
TCC	7.6	9.720%	09/15/01	7.875%	08/01	68	61
TCC	10.0	9.720%	09/25/01	7.875%	08/01	69	62
TCC	5.0	9.900%	12/02/96	7.500%	12/96	45	41
TCC	3.0	9.900%	08/19/98	5.875%	08/98	48	43
TCC	4.5	10.000%	08/19/98	5.875%	08/98	48	43
TCC	5.0	10.000%	12/13/01	7.500%	11/01	70	63
TCC	50.0	10.500%	08/17/98	5.875%	08/98	48	43
TCC	150.0	10.125%	12/01/97	5.250%	12/97	48	43
Inc.	\$2,625						
TGP	725						
TCC	680						
	<u>\$4,030</u>						

NOTE: (1) Case A represents the spread to treasury for each security in the event that the percentage of the aggregate principal amount of the bonds participating in any tender or exchange, measured as a group for all bonds tendered or exchanged for, equals or exceeds 80% of all such bonds eligible to participate. In the event that the percentage of bonds participating in any tender or exchange falls short of 80% (calculated as aforesaid), the market value of all bonds remaining outstanding will be determined by using the spread to treasury indicated in Case B.

**SCHEDULE 4
TO
DEBT AND CASH ALLOCATION AGREEMENT**

Additional Adjustments to Base Amount

1. Indonesia (the South Sulawesi Project)

(a) All expenditures made by Acquiror at any time from and after June 19, 1996 with respect to this project shall have no effect whatsoever on the Base Amount or the calculation thereof.

(b) All expenditures actually incurred and paid by any of Tenneco or its consolidated subsidiaries at any time between June 19, 1996 and the Effective Time (the "Pre-Closing Period") shall be added to the Base Amount (but shall not be included as a capital expenditure for purposes of determining the Actual Energy Expenditures Amount); provided, however, the Base Amount will be reduced by the amount of any Net Cash Proceeds (as defined) received by Tenneco or any of its consolidated subsidiaries during the Pre-Closing Period from any monetization of this project during the Pre-Closing Period. As used in the Schedule 4, the term "Net Cash Proceeds" means the total amount of cash proceeds actually received by the party in question during the Pre-Closing Period from the consummation during the Pre-Closing Period of the transaction or transactions in question, less the sum of any and all costs, expenses and taxes related to the transaction or transactions in question which either are (i) actually incurred and paid by Tenneco or any of its consolidated subsidiaries prior to or at the Effective Time (other than taxes based upon income, which shall not be deducted from cash proceeds in determining Net Cash Proceeds), or (ii) incurred but not paid prior to or at the Effective Time by any member of either the Industrial Group and/or Shipbuilding Group and which will remain an obligation or liability of such entity (or any member of its Group) after giving effect to the Distributions without reimbursement therefor by Tenneco or any other member of the Energy Group.

2. Orange Cogeneration Project

(a) All expenditures made by Acquiror at any time from and after June 19, 1996 with respect to this project shall have no effect whatsoever on the Base Amount or the calculation thereof.

(b) All expenditures actually incurred and paid by any of Tenneco or its consolidated subsidiaries at any time during the Pre-Closing Period shall be added to the Base Amount (but shall not be included as a capital expenditure for purposes of determining the Actual Energy Expenditures Amount); provided, however, the Base Amount will be reduced by the amount of any Net Cash Proceeds received by Tenneco or any of its consolidated subsidiaries during the Pre-Closing Period from any monetization of this project during the Pre-Closing Period.

3. Australian Infrastructure Bonds

(a) The Base Amount shall be reduced by any Net Cash Proceeds received by Tenneco or any of its consolidated subsidiaries during the Pre-Closing Period from any off-balance sheet financing in respect of this project.

4. Asset Sales

(a) *Microwave Licenses.* The Base Amount shall be reduced by the aggregate amount of Microwave Net Cash Proceeds (as defined below) from any sale or assignment during the Pre-Closing Period of private operational-fixed microwave licenses issued by the Federal Communications Commission. As used herein, "Microwave Net Cash Proceeds" means the gross cash proceeds actually received by Tenneco or any of its consolidated subsidiaries less the sum of (i) the total amount of relocation costs and cost and expenses of rebuilding an acceptable replacement communication system that are actually incurred and paid by Tenneco or any of its consolidated subsidiaries during the Pre-Closing Period (or incurred by any member of the Industrial Group or Shipbuilding Group and remain unpaid as of the Effective Time), and (ii) the amount of any taxes incurred in connection with any such sale or assignment which are either (A) actually incurred and paid by Tenneco or any of its consolidated subsidiaries prior to the Effective Time (other than taxes based upon income, which shall not be deducted from cash proceeds in determining Net Cash Proceeds), or (B) incurred by any member of the Shipbuilding Group or Industrial Group and remain unpaid as of the Effective Time and which will remain an obligation or liability of such entity (or any member of its Group) after giving effect to the Distributions without reimbursement therefor by Tenneco or any other member of the Energy Group.

5. Land Sales

(a) *960 Acre Parcel Located Along Galveston Bay at Ingleside, Texas.* The Base Amount shall be reduced by the total amount of Net Cash Proceeds actually received by Tenneco or any of its consolidated subsidiaries at any time during the Pre-Closing Period, in connection with the sale of the above referenced property.

(b) *Westchase Development in West Houston (also known as Tract 6A).* The Base Amount shall be reduced by the total amount of Net Cash Proceeds actually received by Tenneco or any of its consolidated subsidiaries at any time during the Pre-Closing Period in connection with the sale of the above referenced property.

(c) *1625 West Loop (also known as Post Oak Ranch).* The Base Amount shall be reduced by the total amount of Net Cash Proceeds actually received by Tenneco or any of its consolidated subsidiaries at any time during the Pre-Closing Period in connection with the sale of the above referenced property.

6. Sales of Gas Turbines

The Base Amount shall be reduced by the total amount of Net Cash Proceeds actually received by Tenneco or any of its consolidated subsidiaries (and credited to the account of Industrial Company under the Debt and Cash Allocation Agreement) from its sale of any gas turbines at any time during the Pre-Closing Period.

7. ICH Tax Indemnity Matter

The Base Amount shall be increased (without duplication) by any cash payment (up to a maximum amount, however, of \$19.0 million) made by Tenneco or any of its consolidated subsidiaries during the Pre-Closing Period in respect of the settlement of the ICH tax indemnity matter.

8. Payments due on Settlement of Certain Lawsuits During the Pre-Closing Period

All cash payments actually received by Tenneco or any of its consolidated subsidiaries during the Pre-Closing Period in respect of any settlement of any of the lawsuits or other proceedings identified and referred to in paragraph 9 of, and Schedule G-2 to, Exhibit G to the Merger Agreement shall, to the extent provided for under the terms described under paragraph 9 of such Exhibit G, be for the account of Industrial Company and shall not be included in the Guaranteed Energy Cash Amount or have any effect on the Base Amount or the calculation thereof.

9. Hedging Transactions

Any hedging transactions and all costs and expenses with respect thereto that are entered into in connection with or in anticipation of the Debt Realignment shall be for the benefit or detriment of Industrial Company and shall have no effect whatsoever on the Base Amount or the calculation thereof.

10. Rate Refunds Payable to Customers

The Base Amount shall be reduced by the amount, calculated as of the Effective Time, of any rate refunds, including interest, which would be payable to customers pursuant to the rate settlement filed with the Federal Energy Regulatory Commission at Docket No. RP95-112 and have not been paid as of the Effective Time, whether such amounts are to be paid to customers or credited against gas supply realignment costs pursuant to a settlement with customers.

11. Sale of Tenneco Ventures

The Base Amount shall be reduced by the aggregate amount of Net Cash Proceeds actually received by Tenneco or any of its subsidiaries from any sale of Tenneco Ventures during the Pre-Closing Period.

12. Bonuses for Energy Employees

(a) The total amount of cash bonuses for Energy Employees for the calendar year 1996 (the "1996 Bonus Amount") shall be pro rated based on the date on which the Effective Time occurs and shall be shared between Tenneco and Industrial Company based on such pro ration as follows:

(i) Tenneco shall be responsible and liable for the payment of that portion (the "Tenneco Bonus Portion") of the 1996 Bonus Amount that equals the product of (A) the 1996 Bonus Amount, and (B) a fraction, the numerator of which is the number of days remaining in the 1996 calendar year following the day on which the Effective Time occurs (the "Effective Day"), and the denominator of which is 365.

(ii) New Tenneco shall be responsible and liable for the payment of that portion of the 1996 Bonus Amount that equals the amount by which the 1996 Bonus Amount exceeds the Tenneco Bonus Portion.

(b) Each of Tenneco's and New Tenneco's liability for its share of the 1996 Bonus Amount shall be accounted for in the Merger as follows:

(i) If 100% of the 1996 Bonus Amount is paid on or before the Effective Time, the Base Amount shall be increased by the Tenneco Bonus Portion.

(ii) If as of the Effective Time, the amount of the 1996 Bonus Amount that has not been paid exceeds the Tenneco Bonus Portion, the Base Amount shall be reduced by the amount of such excess.

(iii) If as of the Effective Time, the amount of the 1996 Bonus Amount that has not been paid equals the Tenneco Bonus Portion, the Base Amount shall not be increased or decreased in respect of the 1996 Bonus Amount.

(c) The 1996 Bonus Amount shall be determined by Tenneco prior to the Effective Time with the consent of Acquiror which shall not be unreasonably withheld.

13. Non Cash Proceeds

Any proceeds received by Tenneco or any of its subsidiaries from the transactions described in paragraphs 1, 2, 3, 4, 5, 6 and 11 other than cash proceeds shall be for the account of Acquiror and shall be retained by or distributed to the Energy Business.

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KM10000350

**EXHIBIT D TO
DISTRIBUTION AGREEMENT**

**ENERGY BUSINESS
PRO FORMA BALANCE SHEET
June 30, 1996
(UNAUDITED)
(MILLIONS)**

<u>ASSETS</u>	<u>Tenneco Energy Historical</u>	<u>Restructuring, Realignment and NPS Insurance</u>	<u>Tenneco Energy as Adjusted</u>
Current assets:			
Cash and temporary investments	\$ 100	\$ (36)(d) (39)(g)	\$ 25
Receivables	1,190	(116)(a) (357)(b) 48 (c) (5)(d)	760
Other current assets	138	(23)(c) 3 (d)	118
Total current assets	<u>1,428</u>	<u>(525)</u>	<u>903</u>
Net property, plant and equipment	2,924	(39)(c)	2,885
Other assets and deferred charges	1,187	(172)(b) (1)(c)	1,014
Total assets	<u>\$5,539</u>	<u>\$(737)</u>	<u>\$4,802</u>

See accompanying Notes to Unaudited Pro Forma Combined Balance Sheet.

ENERGY BUSINESS
PRO FORMA BALANCE SHEET
June 30, 1996
(UNAUDITED)
(MILLIONS)

<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>	<u>Tenneco Energy Historical</u>	<u>Restructuring, Realignment and NPS Issuance</u>	<u>Tenneco Energy as Adjusted</u>
Current liabilities:			
Short-term debt	\$ 521	\$(521)(f)	\$
Payables	532	(111)(a) (2)(b) (197)(f)	222
Other current liabilities	718	(11)(c) (20)(b) (82)(f)	605
Total current liabilities	<u>1,771</u>	<u>(944)</u>	<u>827</u>
Long-term debt	1,519	1,290 (f) (265)(e)	2,544
Other liabilities and deferred credits	652	(17)(b) (41)(d)	594
Deferred income taxes	413	(13)(b) 1 (c)	401
	<u>4,355</u>	<u>11</u>	<u>4,366</u>
Minority interest	<u>18</u>	<u>—</u>	<u>18</u>
Preferred stock with mandatory redemption provisions	<u>112</u>	<u>—</u>	<u>112</u>
Stockholders' equity:			
Preferred Stock		265 (e)	265
Common Stock			
Additional Paid In Capital			
Accumulated Earnings			
Tenneco Combined Equity	1,054	(5)(a) (477)(b) (5)(c) 3 (d) (490)(f) (39)(g)	41
Total stockholders' equity	<u>1,054</u>	<u>(748)</u>	<u>306</u>
Total liabilities and stockholders' equity	<u>\$5,539</u>	<u>\$(737)</u>	<u>\$4,802</u>

See accompanying Notes to Unaudited Pro Forma Combined Balance Sheet.

ENERGY BUSINESS
NOTES TO PRO FORMA BALANCE SHEET

Restructuring, Realignment and NPS Issuance:

- (a) To reflect the settlement of intercompany trade accounts receivable and intercompany trade accounts payable with Tenneco Energy affiliates.
- (b) To reflect the distribution to New Tenneco of receivables previously sold to Tenneco Credit Corporation, a Tenneco Energy affiliate.
- (c) To reflect the transfer from Tenneco Energy to New Tenneco and affiliates of certain assets and liabilities held at the corporate level.
- (d) To reflect the transfer to New Tenneco of insurance liabilities and the related portfolio of short-term cash investments and other assets previously held by Eastern Insurance Company Limited.
- (e) To reflect the NPS Issuance of \$275 million of Tenneco Junior Preferred Stock, with an assumed 8½% dividend yield, for net NPS Issuance Proceeds of \$265 million, and the use of the net NPS Issuance Proceeds for the repayment of Tenneco Energy Consolidated Debt.
- (f) To reflect the restructuring and realignment of the Tenneco debt pursuant to the Debt Realignment, the Distributions and the applicable provisions of the Merger Agreement, and the assumed payment of accrued interest on the Tenneco Energy Consolidated Debt defeased, redeemed, tendered or exchanged as part of the Debt Realignment. The Pro Forma Financial Statements assume no such reduction in the Base Debt Amount. The amount of "Tenneco Energy as Adjusted" debt immediately prior to the Merger will consist primarily of borrowings under the Tenneco Credit Facility (assuming 100% acceptance of the Debt Tender Offers and Debt Exchange Offers) and is calculated from the provisions of the Merger Agreement as follows (in millions):

Base Debt Amount per Merger agreement	\$2,650
Less: NPS Issuance proceeds	(275)
	2,375
Plus: Cash settlement payments	439
Less: Estimated collections subject to refund	(270)
"Tenneco Energy as Adjusted" debt	<u>\$2,544</u>

At this time, Tenneco management cannot determine the ultimate amount of securities which will be purchased in the Debt Tender Offers, or the ultimate amount of securities which will be exchanged into New Tenneco Public Debt pursuant to the Debt Exchange Offers, and such amount could vary significantly. However, for purposes of these pro forma adjustments, it is assumed that 100% of the securities subject to the Debt Tender Offers are purchased pursuant to the Debt Tender Offers and 100% of the securities subject to the Debt Exchange Offers are exchanged into New Tenneco Public Debt pursuant to the Debt Exchange Offers.

- (g) To reflect distribution from Tenneco Energy of cash in excess of \$25 million pursuant to the Cash Realignment provisions of the Merger Agreement. The distribution may be adjusted by the sale of Tenneco Energy receivables by Tenneco prior to the Merger Effective Time.

75

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EXHIBIT E
TO
DISTRIBUTION AGREEMENT
ENERGY SUBSIDIARIES

Subsidiaries of Tenneco Inc.

Kern County Land Company (Delaware)	100%
Tenneco Equipment Corporation (Delaware)	100
Marlin Drilling Co., Inc. (Delaware)	
Bluefin Supply Company (Delaware)	100
Marlin do Brasil Perfuacoes Maritimas Ltda. (Brazil) (in dissolution)	0.16
(Bluefin Supply Company owns 0.16%; and Marlin Drilling Co., Inc. owns 99.84%)	
Marlin do Brasil Perfuacoes Maritimas Ltda. (Brazil) (in dissolution)	99.84
(Marlin Drilling Co., Inc. owns 99.84%; and Bluefin Supply Company owns 0.16%)	
Tenneco Equipment Holding I Company (Delaware)	100
Tenneco Equipment Holding II Company (Delaware)	100
Tenneco Equipment Holding III Company (Delaware)	100
Tenneco Equipment Holding V Company (North Dakota)	100
Tenneco Equipment Holding IV Company (Wisconsin)	100
Tenneco Equipment Holding VI Company (Illinois)	100
Tenneco West, Inc. (Delaware)	100
Kern County Land Company, Inc. (California)	100
Tenneco Credit Corporation (Delaware)	100
TenFac Corporation (Delaware)	100
Tenneco MLP Inc. (Delaware)	100
Polk Power Partners, L.P. (Delaware Limited Partnership)	100
(Tenneco MLP Inc. owns % as a Limited Partner; CSW Mulberry, Inc., an unaffiliated company, owns % as a Limited Partner; GPSF-A Inc., an Unaffiliated company owns % as Preferred Limited Partner; and Polk Power GP, Inc. owns % as the General Partner.)	
Tenneco Transition Company (Delaware)	100
Tennessee Gas Pipeline Company (Delaware)	100
Altamont Service Corporation (Delaware)	100
Altamont Gas Transmission Canada Limited (Canada)	100
(Altamont Service Corporation is the registered holder of all of the issued and outstanding shares of Altamont Gas Transmission Canada Limited, as Trustee for Altamont Gas Transmission Company, a Joint Venture)	
Border Gas Inc. (Delaware) (a close corp.)	37.5
(Tennessee Gas Pipeline Company owns 100% of the Class A Common Stock, 37.5% of the total equity, and 37.5% of the total voting stock; unaffiliated companies (Texas Eastern Transmission Corporation, El Paso Natural Gas Company, Transcontinental Gas Pipe Line Corporation, Southern Natural Gas Company, and Florida Gas Transmission Company) own the remaining stock and equity.)	
Eastern Insurance Company Limited (Bermuda)	100

Subsidiaries of Tenneco Inc.

Subsidiaries of Tennessee Gas Pipeline Company

East Tennessee Natural Gas Company (Tennessee)	100
Tenneco East Natural Gas L.P. (Delaware Limited Partnership)	1
(East Tennessee Natural Gas Company, as General Partner, owns 1%; and Tenneco East Corporation, as Limited Partner, owns 99%.)	
Energy TRACS, Inc. (Delaware)	100
Kern River Corporation (Delaware)	0.01
Land Ventures, Inc. (Delaware)	100
Midwestern Gas Marketing Company (Delaware)	100
Midwestern Gas Transmission Company (Delaware)	100
Tenneco Midwest Natural Gas L.P. (Delaware Limited Partnership)	1
(Midwestern Gas Transmission Company, as General Partner, owns 1%; and Tenneco Midwest Corporation, as Limited Partner owns 99%.)	
Mont Belvieu Land Company (Delaware)	100
New Tenn Company (Delaware)	100
(New Tenn Company and New Tennessee Gas Pipeline are in the process of being merged into Tennessee Gas Pipeline Company.)	
New Tennessee Gas Pipeline Company (Delaware)	100
(New Tenn Company and New Tennessee Gas Pipeline are in the process of being merged into Tennessee Gas Pipeline Company.)	
S.K. Petroleum Company (Delaware)	100
Sandbar Petroleum Company (Delaware)	100
Tennchase Inc. (Texas)	100
Tenneco Alaska, Inc. (Alaska)	100
Tenneco-Altamont Corporation (Delaware)	100
Altamont Gas Transmission Company (Delaware Joint Venture)	53.34
(Tenneco-Altamont Corporation owns 53%; Amoco Altamont Company, an unaffiliated company, owns 33%; and Entech Altamont, Inc., an unaffiliated company, owns 13%.)	
Tenneco Argentina Corporation (Delaware)	100
Tenneco Baja California Corporation (Delaware)	100
Tenneco Communications Corporation (Delaware)	100
Tenneco Corporation (Delaware)	100
(Tennessee Gas Pipeline Company owns 100% of the Common Stock; Tenneco Credit Corporation owns % of the Second Preferred Stock; Tenneco Equipment Corporation owns % of the Second Preferred Stock; and Tenneco International Inc. owns % of the Second Preferred Stock.)	
Entrade Engine Company (Kentucky)	100
H.T. Gathering Company (Texas)	50
(Tenneco Corporation owns 50% of the issued and outstanding Class A Voting Stock and 20% of the Class B Nonvoting Stock, 29% of the total equity; and Houston Pipe Line Company, an unaffiliated company, owns 50% of the issued and outstanding Class A Voting Stock and 80% of the Class B Nonvoting Stock, 71% of the total equity.)	

Subsidiaries of Tenneco Inc.

Subsidiaries of Tennessee Gas Pipeline Company

Subsidiaries of Tenneco Corporation

Petro-Tex Chemical Corporation (Delaware) (in dissolution)	100
(Certificate of Dissolution was filed in Delaware on January 18, 1995, Final dissolution date will be January 18, 1998, subject to settlement of any other outstanding business.)	
SWL Security Corp. (Texas)	100
TGP Corporation (Delaware)	100
Tenneco Energy Resources Corporation (Delaware)	100
(Tenneco Corporation owns 100% of the Common Stock, 80% of total equity; and Ruhrgas Aktiengesellschaft, an unaffiliated company, owns 100% of the issued and outstanding Series A Common Stock, 20% of total equity.)	
Channel Gas Marketing Company (Delaware)	100
Oasis Pipe Line Company (Delaware)	30
(Channel Gas Marketing Company owns 100% of the issued and outstanding Series B Preference Stock and 30% of the Common Stock, 30% of total equity; Dow Chemical Company, an unaffiliated company owns 100% of the issued and outstanding Series A Preference Stock and 70% of the Common Stock, 70% of total equity.)	
Channel Industries Gas Company (Delaware)	100
Tenneco Energy Marketing Company (Delaware)	100
(Tenneco Gas Trading Company and Tenneco Energy Marketing Company are in the process of being merged into Tenneco Gas Marketing Company.)	
Tenneco Offshore Gathering Company (Delaware)	100
Tenneco Gas Marketing Company (Kentucky)	100
(Tenneco Gas Marketing Company is in the process of changing its name to Tenneco Energy Marketing Company.)	
Creole Gas Pipeline Corporation (Louisiana)	100
Entrade Pipeline Company (Kentucky)	100
Tenneco Gas Processing Company (Delaware)	100
Tenneco Gas Trading Company (Delaware)	100
(Tenneco Gas Trading Company and Tenneco Energy Marketing Company are in the process of being merged into Tenneco Gas Marketing Company.)	
Tennessee Gas Marketing Company (Delaware)	100
Tenneco Independent Power I Company (Delaware)	100
Tenneco Independent Power II Company (Delaware)	100
Tenneco Insurance Ventures (Delaware)	100
Tenneco Minerals Company—California (Delaware)	100
Tenneco Minerals Company—Nevada (Delaware)	100
Tenneco OCS Company, Inc. (Delaware)	100
Tenneco Oil Company (Delaware)	100
Tenneco Polymers, Inc. (Delaware)	100
Tenneco Eastern Realty, Inc. (New Jersey)	100

Subsidiaries of Tenneco Inc.

Subsidiaries of Tennessee Gas Pipeline Company

Subsidiaries of Tenneco Corporation

Tenneco Power Generation Company (Delaware)	100
Orange Acquisition, Inc. (Delaware)	100
Orange Cogeneration Limited Partnership (Delaware Limited Partnership)	49.5
(Orange Acquisition, Inc. owns 49.5% as a Limited Partner; CSW Orange, Inc., an unaffiliated company, owns % as a Limited Partner; and Orange Cogeneration GP, Inc. owns % as General Partner.)	
Orange Cogeneration GP II, Inc. (Delaware)	50
(Tenneco Power Generation Company owns 50%; and CSW Development-I, Inc., an unaffiliated company, owns 50%.)	
Orange Cogeneration G.P., Inc. (Delaware)	100
Polk Power GP II, Inc. (Delaware)	50
(Tenneco Power Generation Company owns 50% and CSW Development-I, Inc., an unaffiliated company, owns 50%.)	
Polk Power GP, Inc.	100
Tenneco Ethanol Company (Delaware)	100
Tenneco Ethanol Services Company (Delaware)	100
West Campus Cogeneration Company (Delaware)	100
Tennessee Overthrust Gas Company (Delaware)	100
Overthrust Pipeline Company (Delaware General Partner)	18
(Tennessee Overthrust Gas Company owns an 18% general partnership interest; unaffiliated parties own 82% partnership interest)	
Tenneco Deepwater Gathering Company (Delaware)	100
Tenneco Delta XII Gas Co., Inc. (Delaware)	100
Tenneco East Corporation (Delaware)	100
Tenneco East Natural Gas L.P. (Delaware Limited Partnership)	99
(Tenneco East Corporation, as Limited Partner, owns 99%; and East Tennessee Natural Gas Company, as General Partner, owns 1%.)	
Tenneco Energy Europe Inc. (Delaware)	100
Tenneco Energy Hungary Inc. (Delaware)	99
Tenneco Energy Ltd. (Canada)	100
Tenneco Energy Services Company (Delaware)	100
GreyStar Corporation (Texas)	50
(Tenneco Energy Services Company owns 50%, and unaffiliated parties own 50%. Tenneco Energy Services Company owns 1,135,294 shares of Series B Preferred Stock, \$0.01 par value per share.)	
Tenneco Energy AIRCO Inc. (Delaware)	100
Tenneco Energy OGS Inc. (Delaware)	100
Tenneco Energy TEPCO Inc. (Delaware)	100
Tenneco Energy Inc. (Delaware)	100
Tenneco EIS Company (Delaware)	100
Tenneco EIS Canada Ltd. (Alberta)	100

Subsidiaries of Tenneco Inc.

Subsidiaries of Tennessee Gas Pipeline Company

Subsidiaries of Tenneco Energy Inc.

Tenneco Gas Transportation Company (Delaware)	100
Tenneco Gas Canada, Ltd. (Ontario)	100
Tenneco Gas International Inc. (Delaware)	100
Tenneco Energy China Inc. (Delaware)	100
Tenneco Gas Brazil Corporation (Delaware)	100
Tenneco Gas International Servicos do Brasil Ltda (Brazil)	100
Tenneco Gas Chile Corporation (Delaware)	100
Tenneco Energy International (East Asia/Pacific) Inc. (Delaware)	100
Tenneco Gas Services (Chile) Corporation (Delaware)	100
Tenneco Gas Transportes S.A. (Chile)	100
Tenneco Gas Latin America Inc. (Delaware)	100
Tenneco Gas Louisiana Inc. (Delaware)	100
Martin Exploration Company (Delaware)	100
Tenneco Gas Production Corporation (Delaware)	100
Tenneco Gas Properties Inc. (Delaware)	100
Tenneco Gas Services, Inc. (Delaware)	100
Tenneco Gas Supply Corporation (Delaware)	100
Tenneco Gas Australia Inc. (Delaware)	100
Tenneco Holdings Pty. Ltd. (Australia)	100
Sulawesi Energy Pty Ltd. (Australia)	50
(Upon the acquisition of the Energy Equity subsidiaries contemplated for the South Sulawesi Project, Tenneco Holdings Pty. Ltd. will own 50%, and an unaffiliated company will own 50%.)	
PT Energi Sengkang (Indonesia)	95
(Upon the acquisition of the Energy Equity subsidiaries contemplated for the South Sulawesi Project, Sulawesi Energy Pty. Ltd. will own 95% and an unaffiliated company will own 5%.)	
Tenneco Energy Australia Pty. Limited (Australia)	100
Tenneco Energy Queensland Pty. Limited (Australia)	100
Tenneco Energy South Australia Pty. Limited (Australia)	100
Tenneco Energy Operations and Maintenance Pty. Ltd. (Australia)	100
Energy Management Technical Systems Pty. Ltd. (Australia)	50
(Upon the acquisition of the Energy Equity subsidiaries contemplated for the South Sulawesi Project, Tenneco Energy Operations and Maintenance Pty. Ltd. will own 50%, and an Unaffiliated company will own 50%.)	
Tenneco Sulawesi Gas Pty. Ltd. (Australia)	100
Energy Equity (Sengkang) Pty. Ltd. (Australia)	50
(Upon the acquisition of the Energy Equity subsidiaries contemplated For the South Sulawesi Project, Tenneco Sulawesi Gas Pty. Ltd. will own 50%, and an unaffiliated company will own 50%.)	

Subsidiaries of Tenneco Inc.

Subsidiaries of Tennessee Gas Pipeline Company

Tenneco International Inc. (Delaware).....	100
Tenneco Nederland B.V. (Netherlands).....	100
Tenneco Offshore Netherlands Company (Delaware)	100
Tenneco Liquids Corporation (Delaware)	100
Tenneco Marketing Services Company (Delaware)	100
Tenneco MTBE, Inc. (Delaware)	100
Tenneco Midwest Corporation (Delaware)	100
Tenneco Midwest Natural Gas L.P. (Delaware Limited Partnership)	99
(Tenneco Midwest Corporation, as Limited Partner, owns 99%; and Midwestern Gas Transmission Company, as General Partner, owns 1%.)	
Tenneco Pittsfield Corporation (Delaware)	100
Tenneco Portland Corporation (Delaware)	100
Tenneco Realty, Inc. (Delaware)	100
Tenneco SNG Inc. (Delaware)	100
Tenneco Trinidad LNG, Inc. (Delaware).....	100
Tenneco Ventures Bolivia Corporation (Delaware)	100
Tenneco Ventures Corporation (Delaware)	100
Tenneco Ventures Poland Corporation (Delaware)	100
Tenneco Western Market Center Corporation (Delaware)	100
The Western Market Center Joint Venture (Joint Venture).....	50
(Tenneco Western Market Center Corporation owns 50%; Entech Gas Ventures, Inc., an unaffiliated company, owns 15%; Questar WMC Corporation, an unaffiliated company, owns 25%; and Fuels WMC Corporation, an unaffiliated company, owns 10%.)	
Tenneco Western Market Center Service Corporation (Delaware).....	100
TennEcon Services, Inc. (Delaware)	100
Tenneco Energy Technology Consulting Services Inc. (Delaware)	100
Tennessee Gas Transmission Company (Delaware).....	100
Tennessee/New England Pipeline Company (Delaware) (sale pending)	100
Tennessee Storage Company (Delaware)	100
Tennessee Trailblazer Gas Company (Delaware)	100
Ten Ten Parking Garage Inc. (Delaware)	100
The Fontanelle Corporation (Louisiana)	100
The F and E Oyster Partnership (Louisiana Partnership)	64
(The Fontanelle Corporation owns 64% as General Partner; and Expedite Oyster, Inc., an unaffiliated company, owns 36% as General Partner.)	
The LaChute Corporation (Louisiana)	100

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**EXHIBIT F TO
DISTRIBUTION AGREEMENT**

**AUTOMOTIVE/PACKAGING BUSINESSES
PRO FORMA BALANCE SHEET
June 30, 1996
(UNAUDITED)
(MILLIONS)**

	Company Historical	Combined Acquisitions Historical*	Pro Forma Adjustments	Post- Acquisitions Pro Forma Combined	Transaction Pro Forma Adjustments	Pro Forma Combined
ASSETS						
Current assets:						
Cash and temporary cash investments	\$ 129	\$ 2	\$	\$ 131	\$ 36 (e) 38 (f)	\$ 205
Receivables	829	74		903	(113)(a) 182 (b) (48)(c) 120 (d)	1,044
Inventories	820	46	6 (i)	872		872
Deferred income taxes	28			28		28
Other current assets	196	8		204	(5)(c) 5 (e)	204
Total Current Assets	<u>2,002</u>	<u>130</u>	<u>6</u>	<u>2,138</u>	<u>215</u>	<u>2,353</u>
Goodwill and intangibles	965		384 (i)	1,349		1,349
Other Assets	808	9		817	9 (c) 10 (g)	836
Plant, property and equipment, net	2,748	148	144 (i)	3,040	39 (c)	3,079
Total Assets	<u>\$6,323</u>	<u>\$287</u>	<u>\$ 534</u>	<u>\$7,344</u>	<u>\$ 273</u>	<u>\$7,617</u>
LIABILITIES AND EQUITY						
Current liabilities:						
Short-term debt	\$ 530	\$	\$ 638 (i)	\$1,168	\$(1,155)(g)	\$ 13
Payables	622	28		650	(23)(a) 2 (b) 17 (c)	629
Other current liabilities	558	76		634		651
Total Current Liabilities	<u>1,710</u>	<u>104</u>	<u>638</u>	<u>2,452</u>	<u>(1,159)</u>	<u>1,293</u>
Long-term debt	1,573	1		1,574	558 (g)	2,132
Deferred income taxes	451		(5)(i)	446	13 (b)	459
Deferred credits and other liabilities	320	53	30 (i)	403	41 (e)	444
Minority interest	301			301		301
Total Liabilities	<u>4,355</u>	<u>158</u>	<u>663</u>	<u>5,176</u>	<u>(547)</u>	<u>4,629</u>
Equity:						
Combined equity	2,168	129	(129)(i)	2,168	(90)(a) 167 (b) (22)(c) 120 (d) 38 (f) 607 (g) (2,988)(h)	—
Common Stock	—	—		—	2 (b)	2
Paid-in Capital	—	—		—	2,986 (h)	2,986
Retained Earnings	—	—		—	— (h)	—
Total Liabilities and Equity	<u>\$6,323</u>	<u>\$287</u>	<u>\$ 534</u>	<u>\$7,344</u>	<u>\$ 273</u>	<u>\$7,617</u>

* Certain amounts have been reclassified to conform to the Company's classification.

See the accompanying Notes to Unaudited Pro Forma Combined Financial Statements.

AUTOMOTIVE/PACKAGING BUSINESSES
NOTES TO PRO FORMA BALANCE SHEET

- (a) To reflect the settlement or capitalization of intercompany accounts receivable and payable with Tenneco affiliates pursuant to the Corporate Restructuring Transactions.
- (b) To reflect the acquisition by the Company of certain receivables from Tenneco Credit Corporation, a Tenneco affiliate, in connection with the Merger.
- (c) To reflect the allocation between the Company, Newport News and Tenneco of certain corporate assets and liabilities in connection with the Corporate Restructuring Transactions, the Distributions and the Merger.
- (d) To reflect a \$120 million receivable from El Paso pursuant to the Merger Agreement and Distribution Agreement for certain tax benefits to be realized as a result of the Debt Realignment.
- (e) To reflect the transfer to the Company of insurance liabilities and the related portfolio of short-term cash investments and other assets previously held by Eastern Insurance Company Limited, a Tenneco affiliate, in connection with the Corporate Restructuring Transactions and the Merger.
- (f) To reflect the cash contribution from Tenneco to the Company pursuant to the Cash Realignment provisions of the Distribution Agreement and Merger Agreement. The contribution of cash between Tenneco and the Company as part of the Cash Realignment may be adjusted by the sale of Energy Business receivables prior to the Merger Effective Time.
- (g) To reflect adjustments to the Company's indebtedness for the pre-Distribution restructuring and refinancing of debt pursuant to the Debt Realignment. If the Debt Realignment had been consummated on June 30, 1996, on a pro forma basis, the Company would have had total long-term debt of \$2,132 million, and short-term debt of \$13 million. The total pro forma long-term debt includes \$2,069 million of Company Public Debt (\$1,950 million aggregate principal amount) assumed to be exchanged in the Debt Exchange Offers, which will be recorded based on the fair values of the Company Public Debt, and \$63 million of long-term debt of Company subsidiaries. At this time, the Company and Tenneco cannot determine the ultimate amount of Tenneco Public Debt which will be exchanged by the applicable Tenneco Public Debt holders into Company Public Debt pursuant to the Debt Exchange Offers and such amount could vary significantly. For purposes of these pro forma adjustments, it is assumed that 100% of the Tenneco Public Debt subject to the Debt Exchange Offers will be exchanged for Company Public Debt pursuant to the Debt Exchange Offers. Tenneco expects to incur an extraordinary charge as a result of the Debt Realignment. Tenneco estimates that this cost will be approximately \$300 million after-tax based on current market rates of interest. Certain other costs will also be incurred in connection with the Corporate Restructuring Transactions and the Distributions which Tenneco estimates will be approximately \$100 million after tax. The effect on the Company's debt of these costs has been reflected in this pro forma adjustment. However, such charges have not been reflected in the pro forma income statement.
- (h) To reflect the distribution of Company Common Stock to the holders of Tenneco Common Stock at an exchange ratio of one share of Company Common Stock for each share of Tenneco Common Stock.
- (i) To reflect short-term debt issued to complete the Combined Acquisitions and the preliminary allocation of purchase price to the assets acquired and liabilities assumed related to the Combined Acquisitions. These purchase accounting adjustments for Clevite and Amoco Foam Products are based on preliminary estimates of fair values and will be adjusted when more complete evaluations of fair values are received. The preliminary allocations have been made solely for purposes of developing these Unaudited Pro Forma Combined Financial Statements.

G

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**EXHIBIT G
TO
DISTRIBUTION AGREEMENT
INDUSTRIAL SUBSIDIARIES**

Subsidiaries of Industrial Company

Autopartes Walker, S.A. de C.V. (Mexico)	99.98%
(Industrial Company owns 99.98% and Monroe Auto Equipment Company owns .02%)	
Counce Limited Partnership (Texas Limited Partnership)	95
(Industrial Company owns 95%, as Limited Partner; and Tenneco Packaging, Inc. owns 5%, as General Partner)	
Counce Finance Corporation (Delaware)	100
Deline Box & Display, Inc. (Delaware)	100
Monroe Auto Equipment Company (Delaware)	100
Autopartes Walker, S.A. de C.V. (Mexico)	0.02
(Industrial Company owns 99.98%; Monroe Auto Equipment Company owns 0.02%)	
Beijing Monroe Automobile Shock Absorber Company Ltd (China)	51
(Monroe Auto Equipment Company owns 51%; and Beijing Automotive Industry Corporation, an unaffiliated company, owns 49%)	
Consortio Terranova S.A. de C.V. (Mexico)	
(Monroe Auto Equipment Company owns 99.99%; and Josan Latinamericana S.A. de C.V., an unaffiliated company, owns 0.01%)	
McPherson Strut Company Inc. (Delaware)	100
Monroe Auto Equipement France, S.A. (France)	100
Monroe Europe Coordination Center N.V. (Belgium)	0.1
(S.A. Monroe Europe N.V. owns 99.9%; and Monroe Auto Equipement France, S.A. owns 0.1%)	
Monroe Packaging N.V. (Belgium)	0.1
(S.A. Monroe Europe N.V. owns 99.9%; and Monroe Auto Equipement France, S.A. owns 0.1%)	
Tenneco Automotive Italia S.r.l. (Italy)	15
(Monroe Auto Equipment Company owns 85%; and Monroe Auto Equipement France, S.A. owns 15%)	
Monroe Auto Pecas S.A. (Brazil)	2.82
(Monroe Auto Equipment Company owns 2.82%; Monroe do Brasil Industria e Comercio Ltda. Owns 82.71%; and Monteiro Aranha S/A, an unaffiliated company, owns 14.47%)	
Monroe-Mexico S.A. de C.V. (Mexico)	99.99
(Monroe Auto Equipment Company owns 99.99%; and Industrial Company owns 0.01%)	
Precision Modular Assembly Corp. (Delaware)	100
Rancho Industries Europe B.V. (Netherlands)	100
Tenneco Automotive Foreign Sales Corporation Limited (Jamaica)	99
(Monroe Auto Equipment Company owns 99%; and Industrial Company owns 1%)	
Tenneco Automotive International Sales Corporation (Delaware) (In Dissolution)	100
Tenneco Automotive Italia S.r.l. (Italy)	85
(Monroe Auto Equipment Company owns 85%; and Monroe Auto Equipement France, S.A. owns 15%)	
Tenneco Automotive Japan Ltd. (Japan)	100
Monroe-Mexico S.A. de C.V. (Mexico)	0.01
(Industrial Company owns 0.01%; and Monroe Auto Equipment Company owns 99.99%)	

Subsidiaries of Industrial Company

Omni-Pac GmbH (Germany)	1
(Tenneco Deutschland Holdinggesellschaft mbH owns 99%; and Industrial Company owns 1%)	
Omni-Pac S.A.R.L. (France)	97
(Omni-Pac GmbH owns 3%; and Industrial Company owns 97%)	
Tenneco Asia Inc. (Delaware)	100
Tenneco Automotive Foreign Sales Corporation Limited (Jamaica)	1
(Industrial Company owns 1%; and Monroe Auto Equipment Company owns 99%)	
Tenneco Automotive Trading Company (Delaware)	100
Tenneco Brake, Inc. (Delaware)	100
Tenneco Brazil Ltda. (Brazil)	100
Monroe do Brazil Industria e Comercio Ltda. (Brazil)	100
Monroe Auto Pecas S.A. (Brazil)	82.71
(Monroe do Brazil Industria e Comercio Ltda. Owns 82.71%; Monroe Auto Equipment Company owns 2.82%; and Monteiro Aranha S/A, an unaffiliated company owns 14.47%)	
Tenneco Business Services Inc. (Delaware)	100
Tenneco Technology Services Inc. (Delaware)	100
Tenneco Deutschland Holdinggesellschaft mbH (Germany)	99.97
(Industrial Company owns 99.97%; and Atlas Bermoeogensverwaltung, an unaffiliated company, owns 0.03%)	
GILLET Unternehmensverwaltungs (Germany)	100
Heinrich Gillet GmbH & Co. KG (Germany)	0.1
(GILLET Unternehmensverwaltungs GmbH owns 0.1%; and Tenneco Deutschland Holdinggesellschaft mbH owns 99.9%)	
Heinrich Gillet GmbH & Co. KG (Germany)	99.9
(Tenneco Deutschland Holdinggesellschaft mbH owns 99.9%; and GILLET Unternehmensverwaltungs GmbH owns 0.1%)	
Gillet-Abgassysteme Zwickau GmbH (Germany)	100
Mastra-Gillet Industria e Comercio Ltda. (Brazil)	50
(Heinrich Gillet GmbH & Co. KG owns 50%; and Mastra Industria e Comercio Ltda., an unaffiliated company, owns 50%)	
Monroe Auto Equipment GmbH (Germany)	100
Omni-Pac Ekco GmbH Verpackungsmittel (Germany)	100
Omni-Pac Poland Sp. z o.o. (Poland)	100
PCA Embalajes Espana, S.L. (Spain)	1
(Omni-Pac Ekco GmbH Verpackungsmittel owns 1%; and PCA Verpackungsmittel GmbH owns 99%)	
Omni-Pac GmbH (Germany)	99
(Tenneco Deutschland Holdinggesellschaft mbH owns 99%; and Industrial Company owns 1%)	
Omni-Pac ApS (Denmark)	100
Omni-Pac A.B. (Sweden)	100
Omni-Pac S.A.R.L. (France)	3
(Omni-Pac GmbH owns 3%; and Industrial Company owns 97%)	

Subsidiaries of Industrial Company

Subsidiaries of Tenneco Deutschland Holdinggesellschaft mbH	
Walker Deutschland GmbH (Germany)	99
(Tenneco Deutschland Holdinggesellschaft mbH owns 99%; and Industrial Company owns 1%)	
Walker Gillet (Europe) GmbH (Germany)	100
Tenneco Hexacomb Acquisition Inv. (Delaware)	100
Tenneco Inc. (Nevada)	100
Tenneco International Holding Corp. (Delaware)	100
Monroe Australia Pty. Limited (Australia)	100
Monroe Springs (Australia) Pty. Ltd. Australia)	100
Monroe Superannuation Pty. Ltd. (Australia)	100
Walker Australia Pty. Limited (Australia)	100
S.A. Monroe Europe N.V. (Belgium)	100
Borusan Amortisor Imalat Ve Ticaret A.S. (Turkey)	16.67
(S.A. Monroe Europe N.V. owns 16.67%; Borusan Holding AS, an unaffiliated company, owns 83.03%; and various unaffiliated individual stockholders own 0.3%)	
Monroe Europe Coordination Center N.V. (Belgium)	99.9
(S.A. Monroe Europe N.V. owns 99.9%; and Monroe Auto Equipement France, S.A. owns 0.1%)	
Monroe Europe (UK) Limited (United Kingdom)	18
(S.A. Monroe Europe N.V. owns 18%; and Tenneco United Kingdom Holdings Limited owns 82%)	
Monroe Packaging N.V. (Belgium)	99.9
(S.A. Monroe Europe N.V. owns 99.9%; and Monroe Auto Equipement France, S.A. owns 0.1%)	
Tenneco Canada Inc. (Ontario)	51.28
(Tenneco International Holding Corp. Owns 100% of the issued and outstanding Common Stock, 51.28% of total equity; and Tenneco United Kingdom Holdings Limited owns 100% of the Class A Stock, 48.72% of total equity)	
98174 Ontario Limited (Ontario)	100
Tenneco Canada Wholesale Finance Company (Alberta)	100
Tenneco Credit Canada Corporation (Alberta)	100
Tenneco Espana Holdings, Inc. (Delaware)	100
Monroe Springs (New Zealand) Pty. Ltd. (New Zealand)	100
Tenneco Espana S.A. (Spain)	100
Gillet Iberica, S.A. (Spain)	100
Manufacturas Fonos, S.L. (Spain)	100
Omni-Pac Embalajes S.A. (Spain)	100
Thibault Investments Limited (Mauritius)	100
Hydraulics Limited (India)	51
(Thibault Investments Limited owns 51% and Bangalore Union Services Limited, an unaffiliated company, owns 49%)	
Tenneco Holdings Danmark A/S (Denmark)	100

Subsidiaries of Industrial Company

Subsidiaries of Tenneco International Holding Corp.

Subsidiaries of Tenneco Holdings Danmark A/S

Gillet Exhaust Technologie (Proprietary) Limited (South Africa)	100
Gillet Lazne Belohrad, s.r.o. (Republic of Czechoslovakia)	100
Heinrich Gillet Portuguesa—Sistemas de Escape, Lda. (Portugal)	100
Walker Danmark A/S (Denmark)	100
Walker Inapal Escapes, S.A. (Portugal)	90
(Tenneco Holdings Danmark A/S owns 90%; Inapal, Industria Nacional de Accesorios Para Automoveis, SA, an unaffiliated company, owns 9.99%; and Walker Danmark A/S owns 0.01%)	
Walker France S.A. (France)	100
Constructions Metallurgiques de Wissembourg—Wimetal (France)	100
Societe Europeenne des Ensembles-Montes (France)	100
Gillet Tubes Technologies G.T.T. (France)	100
Walker Sverige A.B. (Sweden)	100
Tenneco Management Company (Delaware)	100
Tenneco Packaging Inc. (Delaware)	100
A&E Plastics, Inc. (Delaware)	100
Alupak A.G. (Switzerland)	100
American Cellulose Corporation (Delaware)	50
(Tenneco Packaging Inc. owns 50%; and Larry E. Homan, an unaffiliated individual, owns 50%)	
The Corinth and Counce Railroad Company (Mississippi)	100
Marquette, Tomahawk & Western Railroad Company (Wisconsin)	100
Valdosta Southern Railroad Company (Florida)	100
Counce Limited Partnership (Texas Limited Partnership)	5
(Industrial Company owns 95%, as Limited Partner; and Tenneco Packaging Inc. owns 5%, as General Partner)	
Dahlonaga Packaging Corporation (Delaware)	100
Dixie Container Corporation (Virginia)	100
Dixie Convoy Corporation (North Carolina)	100
Dongguan PCA Packaging Co., Ltd. (Peoples Republic of China)	50
(Tenneco Packaging Inc. owns 50%; and Dongguan Dong Ya Color Printing & Packaging Factory, an unaffiliated company, owns 50%)	
EKCO Products, Inc. (Illinois)	100
E-Z Por Corporation (Delaware)	100
Hexacomb Corporation (Illinois)	100
Hexacomb International Sales Corporation (U.S. Virgin Islands)	100
Packaging Corporation of America (Nevada)	100
PCA Box Company (Delaware)	100

Subsidiaries of Industrial Company

Subsidiaries of Tenneco Packaging Inc.

PCA-Budafok (Kartongyar) Kft. (Hungary)	100
PCA Hydro, Inc. (Delaware)	100
PCA Leasing Company (Delaware)	100
PCA Romania Srl (Romania)	50
(Tenneco Packaging Inc. owns 50%; and Kraftcorr Inc., an unaffiliated company owns 50%)	
PCA Tomahawk Corporation (Delaware)	100
PCA Valdosta Corporation (Delaware)	100
PCA Verpackungsmittel GmbH (Germany)	100
PCA Embalajes Espana S.L. (Spain)	99
(PCA Verpackungsmittel GmbH owns 99%; and Omni-Pac Ekco GmbH Verpackungsmittel owns 1%)	
PCA West Inc. (Delaware)	100
Coast-Packaging Company (California General Partnership)	50
(PCA West Inc. owns 50%, as General Partner; and J. G. Haddy Sales Company, an unaffiliated company, owns 50%, as General Partner)	
Pressware International, Inc. (Delaware)	100
Revere Foil Containers, Inc. (Delaware)	100
Tenneco Packaging-Romania S.R.L. (Romania)	100
Tenneco Plastics Company (Delaware)	100
798795 Ontario Limited (Ontario)	100
PCA Canada Inc. (Ontario)	100
Tenneco Romania Holdings Inc. (Delaware)	100
Tenneco United Kingdom Holdings Limited (Delaware)	100
Monroe Europe (UK) Limited (United Kingdom)	82
(Tenneco United Holdings Limited owns 82%; and S.A. Monroe Europe N.V. owns 18%)	
Omni-Pac U.K. Limited (United Kingdom)	100
Packaging Corporation of America (UK) Limited (Scotland)	100
Alpha Products (Bristol Limited) (United Kingdom)	100
Calendered Plastics Limited (United Kingdom)	100
Delyn Packaging Limited (United Kingdom)	100
Penlea Plastics Limited (United Kingdom)	100
Polbeth Packaging Limited (Scotland)	100
Brucefield Plastics Limited (Scotland)	100
Polbeth Packaging (Corby) Limited (Scotland)	100
Tenneco Canada Inc. (Ontario)	48.72
(Tenneco United Kingdom Holdings Limited owns 100% of the Class A Stock, 48.72% of total equity; and Tenneco International Holding Corporation owns 100% of the issued and outstanding common stock, 51.28% of total equity)	
Tenneco Europe Limited (Delaware)	100
Tenneco Asia Limited (United Kingdom)	100

Subsidiaries of Industrial Company

Subsidiaries of Tenneco United Kingdom Holdings Limited

Tenneco International Finance Limited (United Kingdom)	100
Tenneco International Finance B.V. (Netherlands)	100
Tenneco Management (Europe) Limited (United Kingdom)	100
Tenneco Packaging (UK) Limited (United Kingdom)	100
Tenneco West Limited (United Kingdom)	100
Thompson and Stammers Dunmow (Number 6) Limited (United Kingdom)	100
Thompson and Stammers Dunmow (Number 7) Limited (United Kingdom)	100
Thompson and Stammers Dunmow (Number 8) Limited (United Kingdom)	100
Walker Limited (United Kingdom)	100
Gillet Exhaust Manufacturing Limited (United Kingdom)	100
Gillet Pressings Cardiff Limited (United Kingdom)	100
Gillet Torsmaskiner UK Limited (United Kingdom)	50
(Walker Limited owns 100 A Ordinary Shares, 50% of total equity; and AB Torsmaskiner, an unaffiliated company, owns 100 B Ordinary Shares, 50% of total equity)	
Exhaust Systems Technology Limited (United Kingdom)	99.99
(Gillet Torsmaskiner UK Limited owns 99.99%; and Heinrich Gillet GmbH & Co. KG & AB Torsmaskiner, an unaffiliated company owns 0.01%)	
Walker UK Ltd. (United Kingdom)	100
J.W. Hartley (Motor Trade) Limited (United Kingdom)	100
Tenneco—Walker (UK) Limited (United Kingdom)	100
Walker Deutschland GmbH (Germany)	1
(Industrial Company owns 1%; and Tenneco Deutschland Holdinggesellschaft mbH owns 99%)	
Walker Europe, Inc. (Delaware)	100
Walker Electronic Mufflers, Inc. (Delaware)	100
Walker Noise Cancellation Technologies (New York Partnership)	100
(Walker Electronic Mufflers, Inc. owns 50% as General Partner; and Expedite Oyster, Inc., an unaffiliated company, owns 50% as General Partner)	
Walker Manufacturing Company (Delaware)	100
Ced's Inc. (Illinois)	100
Walker Norge A/S (Norway)	100

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EXHIBIT H
TO
DISTRIBUTION AGREEMENT
INSURANCE AGREEMENT

This Insurance Agreement (the "Agreement") is made and entered into as of this day of , 1996, by and among Tenneco Inc., a Delaware corporation ("Tenneco"), New Tenneco Inc., a Delaware corporation ("Industrial Company") and Newport News Shipbuilding Inc., a Delaware corporation ("Shipbuilding Company").

WHEREAS, Tenneco, Industrial Company and Shipbuilding Company have entered into that certain Distribution Agreement, dated as of , 1996 (the "Distribution Agreement"), pursuant to which (i) Tenneco and its Subsidiaries shall cause to be consummated the Corporate Restructuring Transactions in order to restructure, divide and separate their existing businesses and assets so that (a) the Industrial Assets and Industrial Business shall be owned, controlled and operated, directly or indirectly, by the Industrial Company, and (b) the Shipbuilding Assets and Shipbuilding Business shall be owned, controlled and operated, directly or indirectly, by the Shipbuilding Company, and (ii) Tenneco shall distribute on the Distribution Date all of the outstanding capital stock of Industrial Company and Shipbuilding Company as a dividend to the holders of shares of the common stock, par value \$5.00 per share, of Tenneco upon the terms and subject to the conditions set forth in the Distribution Agreement;

WHEREAS, Tenneco, its Subsidiaries and their respective predecessors have historically maintained various Policies for the benefit or protection of one or more of the Energy Covered Persons, Industrial Covered Persons and Shipbuilding Covered Persons;

WHEREAS, in connection with the transactions contemplated by the Distribution Agreement, Tenneco, Industrial Company and Shipbuilding Company have determined that it is necessary and desirable to provide for the respective continuing rights and obligations in respect of said Policies from and after the Distribution Date; and

WHEREAS, pursuant to the Distribution Agreement the parties hereto have agreed to enter into this Agreement.

NOW THEREFORE, in consideration of the mutual agreements, provisions and covenants contained in this Agreement and the Distribution Agreement, the parties hereto hereby agree as follows:

ARTICLE I
DEFINITIONS

1.1 *General.* Unless otherwise defined herein or unless the context otherwise requires, the following terms shall have the following meanings (such meanings to be equally applicable to both the singular and plural forms of the terms defined).

"Agreement" shall mean this Insurance Agreement, dated as of , 1996, by and among Tenneco, Industrial Company and Shipbuilding Company, including any amendments hereto and each Schedule attached hereto.

"Claims Administration" shall mean, with respect to any Policy, the processing of claims made under such Policy, including, without limitation, the reporting of losses or claims to insurance carriers and the management, defense and settlement of claims.

"Claims Deposit" shall mean the amount of funds, as of the Distribution Date, maintained by Tenneco on deposit for the benefit of the insurance carriers under the Retained Policies.

"Claims-Made" shall mean, with respect to any Policy, coverage provided by such Policy for claims made during a period specified therein.

"Claims-Made Policies" shall mean those current and past Policies which are Claims-Made in nature, including but not limited to those Policies identified on Schedule A hereto, which show Tenneco or any of its predecessors as the named insured, but excluding (i) any directors' and officers' liability insurance policies which are or were maintained by or on behalf of Tenneco, (ii) the Exclusive Policies, and (iii) the Retained Policies.

"Common Policies" shall mean the Claims-Made Policies, Occurrence-Based Policies, Eastern Policies and Retained Policies.

"Consent" shall have the meaning set forth in Section 2.3 hereof.

"Corporate Restructuring Transactions" shall have the meaning set forth in the Distribution Agreement.

"Covered Persons" shall mean (i) with respect to Tenneco, the Energy Covered Persons, (ii) with respect to Industrial Company, the Industrial Covered Persons, and (iii) with respect to Shipbuilding Company, the Shipbuilding Covered Persons.

"Current Claims-Made Policies" shall mean the Claims-Made Policies in effect as of the Distribution Date, which Policies are set forth on Schedule A hereto.

"Current Occurrence-Based Policies" shall mean the Occurrence-Based Policies in effect as of the Distribution Date, which Policies are set forth on Schedule B hereto.

"Distribution Agreement" shall mean that certain Distribution Agreement, dated as of 1996, by and among Tenneco, Industrial Company and Shipbuilding Company, including any amendments, exhibits and schedules thereto.

"Distribution Date" shall have the meaning set forth in the Distribution Agreement.

"Eastern Policies" shall mean the Policies identified on Schedule C hereto, which Policies show a member of the Energy Group as the named insured, together with any predecessor policies thereto.

"Energy" shall mean, when unqualified, the Energy Assets, Energy Liabilities and/or Energy Business.

"Energy Business" shall have the meaning set forth in the Distribution Agreement.

"Energy Covered Person" shall mean each member of the Energy Group and any other Person, in each case to the extent any Policy addressed herein purports to provide insurance coverage in respect of any claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages or expenses incurred by such Person arising out of, in connection with or otherwise related to Energy.

"Energy Group" shall have the meaning set forth in the Distribution Agreement.

"Energy Liabilities" shall have the meaning set forth in the Distribution Agreement.

"Exclusive Policies" shall mean the Tenneco Exclusive Policies, Industrial Exclusive Policies and Shipbuilding Exclusive Policies.

"Group" shall have the meaning set forth in the Distribution Agreement.

"Industrial" shall mean, when unqualified, the Industrial Assets, Industrial Liabilities, Prior Industrial Businesses and/or Industrial Business.

"Industrial Assets" shall have the meaning set forth in the Distribution Agreement.

"Industrial Business" shall have the meaning set forth in the Distribution Agreement.

"Industrial Covered Person" shall mean each member of the Industrial Group and any other Person, in each case to the extent any Policy addressed herein purports to provide insurance coverage in respect of any claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages or expenses incurred by such Person arising out of, in connection with or otherwise related to Industrial.

"Industrial Exclusive Policies" shall mean all current and past Policies which show Industrial Company, any other member of the Industrial Group or any of their respective predecessors as the named insured and do not purport to relate to Energy or Shipbuilding or to cover any Energy Covered Person or Shipbuilding Covered Person, but excluding any Retained Policy.

"Industrial Group" shall have the meaning set forth in the Distribution Agreement.

"Industrial Liabilities" shall have the meaning set forth in the Distribution Agreement.

"Insurance Administration" shall mean, with respect to any Policy, the accounting for premiums, defense costs, indemnity payments, deductibles and retentions, as appropriate, under the terms and conditions of such Policy, and the distribution of Insurance Proceeds.

"Insurance Proceeds" shall mean those monies, net of any applicable premium adjustment, deductible, retention or similar cost paid or held by or for the benefit of an insured party which are either (i) received by an insured from an insurance carrier, or (ii) paid by an insurance carrier on behalf of an insured.

"Letters of Credit" shall have the meaning set forth in Section 7.1 hereof.

"Merger Agreement" shall have the meaning set forth in the Distribution Agreement.

"Occurrence-Based" shall mean, with respect to any Policy, coverage provided by such Policy for acts, omissions, damages or injuries which occur or are alleged to have occurred during a period specified in such Policy.

"Occurrence-Based Policies" shall mean those current and past Policies which are Occurrence-Based in nature, including but not limited to those policies identified on Schedule B hereto, which show Tenneco or any of its predecessors as the named insured, but excluding (i) any directors' and officers' liability policies which are or were maintained by or on behalf of Tenneco, (ii) the Exclusive Policies, (iii) the Retained Policies, and (iv) the Eastern Policies.

"Other Claims-Made Policies" shall mean the Claims-Made Policies other than the Transferred Claims-Made Policies.

"Other Occurrence-Based Policies" shall mean the Occurrence-Based Policies other than the Transferred Occurrence-Based Policies.

"Person" shall have the meaning set forth in the Distribution Agreement.

"Policies" means insurance policies and insurance contracts of any kind (other than life and benefits policies or contracts), including, without limitation, primary, excess and umbrella policies, commercial general liability policies, fiduciary liability, automobile, aircraft, property and casualty, workers' compensation and employee dishonesty insurance policies, bond and self-insurance and captive insurance company arrangements, together with the rights, benefits and privileges thereunder.

"Prior Industrial Businesses" shall have the meaning set forth in the Distribution Agreement.

"Prior Shipbuilding Businesses" shall have the meaning set forth in the Distribution Agreement.

"Retained Policies" shall mean the Policies identified on Schedule D hereto, together with all other current and past primary, workers' compensation, automobile liability and general liability (including products liability) Policies showing Tenneco, any other member of the Energy Group or any of their respective predecessors as the insured party and which are cost plus, fronting, high deductible or retrospective premium programs but excluding the Eastern Policies.

"Shipbuilding" shall mean, when unqualified, the Shipbuilding Assets, Shipbuilding Liabilities, Prior Shipbuilding Businesses and/or Shipbuilding Business.

"Shipbuilding Assets" shall have the meaning set forth in the Distribution Agreement.

"Shipbuilding Business" shall have the meaning set forth in the Distribution Agreement.

"Shipbuilding Covered Person" shall mean each member of the Shipbuilding Group and any other Person, in each case to the extent any Policy addressed herein purports to provide insurance coverage in respect of any claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages or expenses incurred by such Person arising out of, in connection with or otherwise related to Shipbuilding.

"Shipbuilding Exclusive Policies" shall mean all current and past Policies which show Shipbuilding Company, any other member of the Shipbuilding Group or any of their respective predecessors as the named insured and do not purport to relate to Energy or Industrial or to cover any Energy Covered Person or Industrial Covered Person, but excluding any Retained Policy.

"Shipbuilding Group" shall have the meaning set forth in the Distribution Agreement.

"Shipbuilding Liabilities" shall have the meaning set forth in the Distribution Agreement.

"Subsidiary" shall have the meaning set forth in the Distribution Agreement.

"Tenneco Exclusive Policies" shall mean all current and past Policies, including but not limited to the current Policies set forth on Schedule E hereto, which show Tenneco, any other member of the Energy Group or any of their respective predecessors as the named insured and do not purport to relate to Shipbuilding or Industrial or to cover any Shipbuilding Covered Person or Industrial Covered Person, excluding (i) any directors' and officers' liability policies which are or were maintained by or on behalf of Tenneco, and (ii) any Retained Policy.

"Termination Time" shall mean 11:59 p.m., Houston, Texas time, on the Distribution Date.

"Transferred Claims-Made Policies" shall have the meaning set forth in Section 2.2 hereof.

"Transferred Occurrence-Based Policies" shall have the meaning set forth in Section 2.1 hereof.

"Transferred Policies" shall have the meaning set forth in Section 2.3 hereof.

1.2 References. References herein to a "Schedule" are, unless otherwise specified, to one of the Schedules attached to this Agreement, and references to an "Article" or a "Section" are, unless otherwise specified, to one of the Articles or Sections, respectively, of this Agreement.

ARTICLE II

SUBSTITUTION OF NAMED INSUREDS AND CANCELLATION OF POLICIES

2.1 Current Occurrence-Based Policies. On or prior to the Distribution Date, Tenneco shall take or cause to be taken all necessary or appropriate action (i) so that the Industrial Company is substituted as the named insured under those Current Occurrence-Based Policies identified on Schedule 2.1-A hereto (the "Transferred Occurrence-Based Policies"), effective as of the Termination Time, and (ii) to cause the Current Occurrence-Based Policies identified on Schedule 2.1-B hereto to be cancelled as of, and to afford no further coverage to the insureds thereunder except as otherwise contemplated by this Agreement from and after, the Termination Time. Industrial Company agrees to be substituted as a named insured under the Transferred Occurrence-Based Policies and to execute such further documents as Tenneco may reasonably request in connection therewith.

2.2 Current Claims-Made Policies. On or prior to the Distribution Date, Tenneco shall take or cause to be taken all necessary or appropriate action (i) so that the Industrial Company is substituted as the named insured under those Current Claims-Made Policies identified on Schedule 2.2-A hereto (the "Transferred Claims-Made Policies"), effective as of the Termination Time, and (ii) to cause the Current Claims-Made Policies identified on Schedule 2.2-B hereto to be cancelled as of, and to afford no further coverage to the insureds thereunder except as otherwise contemplated by this Agreement from and after, the Termination Time. Industrial Company agrees to be substituted as a named insured under the Transferred Claims-Made Policies and to execute such further documents as Tenneco may reasonably request in connection therewith.

2.3 Consent. Tenneco and Industrial Company shall each use its best efforts to obtain prior to the Distribution Date the consent of each insurance carrier under the Transferred Occurrence-Based Policies and the Transferred Claims-Made Policies (collectively, the "Transferred Policies") that is required to consummate the transactions contemplated by Sections 2.1 and 2.2 hereof (each, a "Consent"), it being understood that if Consent to such transactions is not received as contemplated by this Section 2.3 with respect to any Policy, such Policy shall nonetheless be considered and treated as a Transferred Claims-Made Policy or Transferred Occurrence-Based Policy, as the case may be, for purposes of this Agreement.

2.4 No Transfer of Certain Policies. Notwithstanding anything in this Agreement to the contrary, this Agreement shall not constitute an agreement to substitute Industrial Company as the named insured under any Transferred Policy without Consent thereto if such substitution or attempt to substitute without such Consent would constitute a breach of such Transferred Policy. If Consent to such substitution is not obtained prior to the Distribution Date, Tenneco and Industrial Company agree to negotiate in good faith an arrangement which shall place the Industrial Company, insofar as reasonably possible, in the same position as would have existed had such Consent to substitution been obtained prior to the Distribution Date.

ARTICLE III

COVERAGE

3.1 Maintenance of Coverage Through Distribution Date. From the date hereof up to the Termination Time, the parties hereto agree to maintain (and to cause each member of their respective Groups over which they have legal or effective direct or indirect control to maintain) in full force and effect the Occurrence-Based Policies, Claims-Made Policies, Eastern Policies and Retained Policies for the benefit of any Energy Covered Person, Industrial Covered Person and Shipbuilding Covered Person to which such Policies by their terms relate.

3.2 Coverage Under Occurrence-Based Policies.

(a) **Termination of Coverage Under Transferred Occurrence-Based Policies.** The parties hereto agree to take or cause to be taken all necessary or appropriate action so that, notwithstanding anything to the contrary contained in any Transferred Occurrence-Based Policy, effective as of the Termination Time coverage under the Transferred Occurrence-Based Policies shall be terminated (it being understood that such Transferred

Occurrence-Based Policies shall nonetheless remain in full force and effect) so that none of the Transferred Occurrence-Based Policies shall afford any further coverage to any Energy Covered Person or Shipbuilding Covered Person for occurrences which take place or are alleged to have taken place after the Termination Time. From and after the Termination Time, coverage under any Transferred Occurrence-Based Policy may, at the option of Industrial Company, continue for any Industrial Covered Person upon the terms and conditions of such Transferred Occurrence-Based Policy.

(b) *Termination of Coverage Under Other Occurrence-Based Policies.* The parties hereto agree to take or cause to be taken all necessary or appropriate action so that, notwithstanding anything to the contrary contained in any Other Occurrence-Based Policy, effective as of the Termination Time coverage under the Other Occurrence-Based Policies shall be terminated so that none of the Other Occurrence-Based Policies shall afford any further coverage to any Energy Covered Person, Industrial Covered Person or Shipbuilding Covered Person for occurrences which take place or are alleged to have taken place after the Termination Time.

(c) *Access to Policies Following Termination Time.* Notwithstanding the provisions of Sections 3.2(a) and 3.2(b) hereof, from and after the Termination Time each Energy Covered Person, Industrial Covered Person and Shipbuilding Covered Person shall have the right to coverage and to make or pursue a claim for coverage under any Occurrence-Based Policy with respect to all claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages and expenses incurred or claimed to have been incurred prior to the Termination Time by such Covered Person in or in connection with the operation of, or otherwise related to, (i) Energy, with respect to any Energy Covered Person, (ii) Industrial, with respect to any Industrial Covered Person, or (iii) Shipbuilding, with respect to any Shipbuilding Covered Person, in each case subject to the terms, conditions and limitations of such Occurrence-Based Policy, provided, however, that nothing in this Section 3.2(c) shall be deemed to constitute or reflect an assignment of any such Occurrence-Based Policy.

(d) *Policy Limits.* Any Energy Covered Person, Industrial Covered Person or Shipbuilding Covered Person entitled hereunder to make or pursue a claim for insurance coverage under an Occurrence-Based Policy may claim for such insurance as and to the extent that such insurance is available up to the full extent of the applicable limits of liability under such Occurrence-Based Policy. Notwithstanding the foregoing, each of Tenneco, Industrial Company and Shipbuilding Company shall, to the extent any of its respective Covered Persons shall have exhausted all or any portion of the limits of liability, if any, under any Occurrence-Based Policy, use its best efforts to either (i) obtain and comply in full with the conditions required to effect the reinstatement of the full limits of liability under such Occurrence-Based Policy for all claims which would be covered thereby absent such exhaustion (including any pending or known claims) and be responsible for and pay all costs and expenses, including the amount of any resultant increase in the premium charged in respect of such Occurrence-Based Policy or any renewal thereof, in connection therewith, or (ii) obtain and maintain in full force and effect a Policy in replacement of the limits of liability exhausted under such Occurrence-Based Policy for all claims which would be covered thereby absent such exhaustion (including any pending or known claims), and be responsible for and pay all costs and expenses in connection therewith, which Policy shall provide at least the same coverage, and contain terms and provisions which are no less favorable to the insured parties, as existed under the Occurrence-Based Policy in respect of which such replacement is obtained, provided, however, that no party hereto shall be required to expend more than an amount equal to 350% of the original premium paid with respect to the portion of the limits of liability under such Occurrence-Based Policy (determined on a pro rata basis) exhausted by such party's respective Covered Persons to obtain reinstatement or a replacement Policy as contemplated hereby, it being understood that each party hereto shall nonetheless be required to obtain the maximum amount of reinstatement or replacement coverage available for such 350% premium amount in accordance with the terms and provisions of clauses (i) or (ii) hereof, as applicable. If at any time a party (an "Impairing Party") hereto becomes aware (such party being deemed to be aware whenever any of the directors or executive officers of such party or any other member of its respective Group become aware) of a claim or potential claim against any of such Impairing Party's respective Covered Persons which claim is reasonably likely to exhaust (but has not yet exhausted) all or any portion of the aggregate limits of liability, if any, under any Occurrence-Based Policy (a "Potential Impairment"), such Impairing Party shall promptly provide notice of

such Potential Impairment to the other parties hereto. Such Impairing Party shall have five business days after providing such notice to elect to, at that time, either secure reinstatement of the limits of liability under such Occurrence-Based Policy (to the extent provided for therein) or purchase a Policy in replacement of such limits of liability (in each case in accordance with the terms and provisions of the second preceding sentence) in respect of such Potential Impairment (but shall not be required to so elect at such time). If such Impairing Party does not timely elect to secure reinstatement or replacement coverage, then either or both of the other parties hereto may elect to reinstate the limits of liability under such Occurrence-Based Policy (to the extent provided for therein) and pay all expenses incurred in connection therewith, provided, however, that if such Potential Impairment actually occurs, the Impairing Party shall reimburse the other parties for any fees and expenses incurred by such parties in connection with such reinstatement.

3.3 Coverage Under Claims-Made Policies.

(a) *Termination of Coverage Under Transferred Claims-Made Policies.* The parties hereto agree to take or cause to be taken all necessary or appropriate action so that, notwithstanding anything to the contrary contained in any Transferred Claims-Made Policy, effective as of the Termination Time coverage under the Transferred Claims-Made Policies shall be terminated (it being understood that such Transferred Claims-Made Policies shall nonetheless remain in full force and effect) so that none of the Transferred Claims-Made Policies shall afford any further coverage to any Energy Covered Person or Shipbuilding Covered Person for claims which have not been reported or made as provided by the terms of such Transferred Claims-Made Policy prior to the Termination Time. From and after the Termination Time, coverage under any Transferred Claims-Made Policy may, at the option of Industrial Company, continue for any Industrial Covered Person upon the terms and conditions of such Transferred Claims-Made Policy.

(b) *Termination of Coverage Under Other Claims-Made Policies.* The parties hereto agree to take or cause to be taken all necessary or appropriate action so that, notwithstanding anything to the contrary contained in any Other Claims-Made Policy, effective as of the Termination Time coverage under the Other Claims-Made Policies shall be terminated so that no Other Claims-Made Policy shall afford any further coverage to any Energy Covered Person, Industrial Covered Person or Shipbuilding Covered Person for claims which have not been reported or made as provided by the terms of such Other Claims-Made Policy prior to the Termination Time.

(c) *Access to Policies Following Termination Time.* Notwithstanding the provisions of Sections 3.3(a) and 3.3(b) hereof, from and after the Termination Time each Energy Covered Person, Industrial Covered Person and Shipbuilding Covered Person shall have the right to coverage and to make or pursue a claim for coverage under any Claims-Made Policy with respect to all claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages and expenses which are reported in accordance with the terms of such Claims-Made Policy prior to the Termination Time and which are incurred or claimed to be incurred by such Covered Person in or in connection with the operation of, or otherwise related to, (i) Energy, with respect to any Energy Covered Person, (ii) Industrial, with respect to any Industrial Covered Person, or (iii) Shipbuilding, with respect to any Shipbuilding Covered Person, in each case subject to the terms, conditions and limitations of such Claims-Made Policy, provided, however, that nothing in this Section 3.3(c) shall be deemed to constitute or reflect an assignment of any such Claims-Made Policy.

(d) *Policy Limits.* Any Energy Covered Person, Industrial Covered Person or Shipbuilding Covered Person entitled hereunder to make or pursue a claim for insurance coverage under a Claims-Made Policy may claim for such insurance as and to the extent that such insurance is available up to the full extent of the applicable limits of liability under such Claims-Made Policy. Notwithstanding the foregoing, each of Tenneco, Industrial Company and Shipbuilding Company shall, to the extent any of its respective Covered Persons shall have exhausted all or any portion of the limits of liability, if any, under any Claims-Made Policy, use its best efforts to either (i) obtain and comply in full with the conditions required to effect the reinstatement of the full limits of liability under such Claims-Made Policy for all claims which would be covered thereby absent such exhaustion (including any pending or known claims) and be responsible for and pay all costs and expenses, including the amount of any resultant increase in the premium charged in respect of such Claims-Made Policy or any renewal

thereof, in connection therewith, or (ii) obtain and maintain in full force and effect at its own cost a Policy in replacement of the limits of liability exhausted under such Claims-Made Policy for all claims which would be covered thereby absent such exhaustion (including any pending or known claims), and be responsible for and pay all costs and expenses in connection therewith, which Policy shall provide at least the same coverage, and contain terms and provisions which are no less favorable to the insured parties, as existed under the Claims-Made Policy in respect of which such replacement is obtained, provided, however, that no party hereto shall be required to expend more than an amount equal to 350% of the original premium paid with respect to the portion of the limits of liability under such Claims-Made Policy (determined on a pro rata basis) exhausted by such party's respective Covered Persons to obtain reinstatement or a replacement Policy as contemplated hereby, it being understood that each party hereto shall nonetheless be required to obtain the maximum amount of reinstatement or replacement coverage available for such 350% premium amount in accordance with the terms and provisions of clauses (i) or (ii) hereof, as applicable. If at any time an Impairing Party becomes aware (such party being deemed to be aware whenever any of the directors or executive officers of such party or any other member of its respective Group become aware) of a claim or potential claim against any of such Impairing Party's respective Covered Persons which claim is reasonably likely to exhaust (but has not yet exhausted) all or any portion of the aggregate limits of liability, if any, under any Claims-Made Policy (a "Potential Impairment"), such Impairing Party shall promptly provide notice of such Potential Impairment to the other parties hereto. Such Impairing Party shall have five business days after providing such notice to elect to, at that time, either secure reinstatement of the limits of liability under such Claims-Made Policy (to the extent provided for therein) or purchase a Policy in replacement of such limits of liability (in each case in accordance with the terms and provisions of the second preceding sentence) in respect of such Potential Impairment (but shall not be required to so elect at such time). If such Impairing Party does not timely elect to secure reinstatement or replacement coverage, then either or both of the other parties hereto may elect to reinstate the limits of liability under such Claims-Made Policy (to the extent provided for therein) and pay all expenses incurred in connection therewith, provided, however, that if such Potential Impairment actually occurs, the Impairing Party shall reimburse the other parties for any fees and expenses incurred by such parties in connection with such reinstatement.

3.4 Coverage Under Retained Policies.

(a) *Termination of Coverage at Termination Time.* The parties hereto agree to take or cause to be taken all necessary or appropriate action so that, except as otherwise contemplated by the terms of this Agreement and notwithstanding anything to the contrary contained in any Retained Policy, effective as of the Termination Time any and all coverage of any Industrial Covered Person or Shipbuilding Covered Person under the Retained Policies shall be terminated (it being understood that such Retained Policies shall nonetheless remain in full force and effect). From and after the Termination Time, coverage under any of the Retained Policies may, at the option of Tenneco, continue for any Energy Covered Person upon the terms and conditions of such Retained Policies.

(b) *Access to Policies and Policy Limits.* Notwithstanding the provisions of Section 3.4(a) hereof, from and after the Termination Time each Industrial Covered Person and Shipbuilding Covered Person shall have the right to coverage and to make or pursue a claim for coverage under any Retained Policy with respect to all claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages and expenses incurred or claimed to have been incurred prior to the Termination Time by such Covered Person in or in connection with the operation of, or otherwise related to, (i) Industrial, with respect to any Industrial Covered Person, or (ii) Shipbuilding, with respect to any Shipbuilding Covered Person, in each case subject to the terms, conditions and limitations of such Retained Policy, provided, however, that nothing in this Section 3.4(b) shall be deemed to constitute or reflect an assignment of any such Retained Policy. Any Industrial Covered Person or Shipbuilding Covered Person may claim insurance coverage under a Retained Policy as and to the extent that such insurance is available up to the full extent of the applicable limits of liability under such Retained Policy.

3.5 Coverage Under Eastern Policies.

(a) *Termination of Coverage Under Eastern Policies.* The parties hereto agree to take or cause to be taken all necessary or appropriate action so that, notwithstanding anything to the contrary contained in any Eastern

Policies, effective as of the Termination Time coverage under the Eastern Policies shall be terminated (it being understood that such Eastern Policies in full force and effect as of the Termination Time shall nonetheless remain in full force and effect) so that the Eastern Policies do not afford any further coverage to any Industrial Covered Person or Shipbuilding Covered Person for occurrences which take place or are alleged to have taken place after the Termination Time. From and after the Termination Time, coverage under the Eastern Policies may, at the option of Tenneco, continue for any Energy Covered Person upon the terms and conditions of the Eastern Policies.

(b) *Access to Eastern Policies Following Termination Time.* Notwithstanding the provisions of Sections 3.5(a) hereof, from and after the Termination Time each Energy Covered Person, Industrial Covered Person (to the extent (but only to that extent and subject to the last sentence of this Section 3.5(b) and Section 3.5(d)) payment under any Eastern Policy is a condition precedent to the provision of coverage by any insurer providing coverage in the same layer as, or a layer excess to that of, such Eastern Policy) and Shipbuilding Covered Person (to the extent (but only to the extent and subject to the last sentence of this Section 3.5(b)) necessary to access reinsurance policies) shall have the right to coverage and to make or pursue a claim for coverage under any Eastern Policy with respect to all claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages and expenses incurred or claimed to have been incurred prior to the Termination Time by such Covered Person in or in connection with the operation of, or otherwise related to, (i) Energy, with respect to any Energy Covered Person, (ii) Industrial, with respect to any Industrial Covered Person, or (iii) Shipbuilding, with respect to any Shipbuilding Covered Person, in each case, subject to the terms, conditions and limitations of such Eastern Policy, provided, however, that nothing in this Section 3.5(b) shall be deemed to constitute or reflect an assignment of the Eastern Policies. The parties hereto agree to take or cause to be taken all necessary or appropriate actions so that, from and after the Termination Time, no Industrial Covered Person or Shipbuilding Covered Person shall be entitled to coverage or to make or pursue a claim for coverage under the Eastern Policies except to the extent expressly provided for herein and in no event shall the Eastern Insurance Provider (as defined below) or any of its subsidiaries have any obligation or liability to any Shipbuilding Covered Person or Industrial Covered Person under any Eastern Policy which is not either as a conduit with respect to third party reinsurance or subject to reimbursement by Industrial Company pursuant to Section 3.5(d).

(c) *Policy Limits.* Any Energy Covered Person, Industrial Covered Person or Shipbuilding Covered Person entitled hereunder to make or pursue a claim for insurance coverage under the Eastern Policies may claim for such insurance as and to the extent that such insurance is available up to the full extent of the applicable limits of liability under the Eastern Policies, subject to the provisions of Section 3.5(b).

(d) *Reimbursement Obligation of Industrial Company.* Industrial Company agrees to reimburse to the insurer under each Eastern Policy (the "Eastern Insurance Provider") the full amount of any claim for insurance coverage for an Industrial Covered Person under such Eastern Policy made pursuant to the terms of Section 3.5(b) hereof which is actually paid by said Eastern Insurance Provider after the Termination Time.

3.6 *Coverage Under Exclusive Policies.* From and after the Termination Time, coverage under any Exclusive Policy may continue with respect to any claims, suits, actions, proceedings, injuries, losses, liabilities, occurrences, damages or expenses incurred or claimed to have been incurred prior to, on or after the Distribution Date, subject to the terms, conditions and limitations of such Exclusive Policy, provided, however, that (i) no member of the Energy Group shall have any liability or obligation with respect to any of the Industrial Exclusive Policies or Shipbuilding Exclusive Policies, (ii) no member of the Industrial Group shall have any liability or obligation with respect to any of the Tenneco Exclusive Policies or Shipbuilding Exclusive Policies, and (iii) no member of the Shipbuilding Group shall have any liability or obligation with respect to any of the Tenneco Exclusive Policies or Industrial Exclusive Policies.

3.7 *Assistance in Obtaining Additional Coverage.* Each of the parties hereto agrees to use its reasonable best efforts to assist the other parties in the transition to separate insurance coverage for the Energy Group, Industrial Group and Shipbuilding Group from and after the Distribution Date which assistance shall include, but shall not be limited to, the identification of potential insurance carriers.

3.8 Discovery Periods. Except with respect to any Industrial Covered Person and except as the parties hereto may otherwise agree, the parties hereto acknowledge and agree that when this Agreement calls for the termination of insurance coverage under a Claims-Made Policy such insurance coverage shall be terminated as of the time specified and that no discovery period of coverage in respect of such Policy shall be provided thereunder, notwithstanding anything to the contrary contained herein or in any such Policy. Notwithstanding the foregoing, if requested to do so by Tenneco, Industrial Company shall use its reasonable efforts to procure that the relevant insurers under the Claims-Made Policies offer to Tenneco a discovery period of coverage under said Claims-Made Policies for Energy Covered Persons with an aggregate limitation of liability separate from the limitation of liability under said Claims-Made Policies for coverage afforded Industrial Covered Persons. All premiums, costs and other charges with respect to any discovery period of coverage provided under any Claims-Made Policy shall be the sole responsibility of (i) Tenneco, with respect to coverage for Energy Covered Persons, and (ii) Industrial Company, with respect to coverage for Industrial Covered Persons. Each party hereto shall not (and shall not permit any of its respective Covered Persons over which it has legal or effective direct or indirect control to) take any action contrary to the provisions of this Section 3.8.

3.9 Further Assurances. Each of Tenneco, Industrial Company and Shipbuilding Company agree to take (and to cause each of its respective Covered Persons over which it has direct or indirect legal or effective control to take) all such actions as are necessary or appropriate, including the provision of notice to all relevant insurance carriers and cooperation with respect to the obtaining of any reinstatement of limitations on liability as contemplated hereby, to effectuate the purposes of this Article III.

ARTICLE IV

PREMIUMS, DEDUCTIBLES AND RELATED MATTERS

4.1 Occurrence-Based and Claims-Made Policies.

(a) *Premiums in Respect of Occurrence-Based and Claims-Made Policies.* From and after the Termination Time, all premiums, costs and other charges with respect to any Occurrence-Based Policy or Claims-Made Policy shall be paid by Industrial Company, provided, however, that (i) Tenneco shall promptly reimburse Industrial Company in full for any such premiums, costs or other charges in respect of the cover afforded under any such Occurrence-Based Policy or Claims-Made Policy to any Energy Covered Person, and (ii) Shipbuilding Company shall promptly reimburse Industrial Company in full for any such premiums, costs or other charges in respect of the cover afforded under any such Occurrence-Based Policy or Claims-Made Policy to any Shipbuilding Covered Person, in each case determined in accordance with Tenneco's historical practices with respect to the allocation of such premiums, costs and charges prior to the date hereof. All amounts refunded from and after the Termination Time by insurance carriers in respect of premiums previously paid under any Occurrence-Based Policy or Claims-Made Policy shall be the sole property of Industrial Company, provided, however, that Industrial Company shall promptly pay to Tenneco or the Shipbuilding Company, as applicable, upon receipt thereof from an insurance carrier, the Energy Group's or the Shipbuilding Group's respective share of any such amounts refunded (such respective share to be determined in accordance with Tenneco's historical practices with respect to the allocation of insurance premiums among its Subsidiaries and divisions prior to the date hereof). Each of Tenneco and Shipbuilding Company shall (and shall cause each member of its respective Group over which it has direct or indirect legal or effective control to) promptly pay to Industrial Company any such refunded amounts actually received by it to which Industrial Company is entitled pursuant hereto.

(b) *Deductibles, Retentions and Self-Insured Amounts.* From and after the Termination Time, all deductibles, retentions and self-insured amounts with respect to coverage or a claim for coverage under any Occurrence-Based Policy or Claims-Made Policy shall be the sole responsibility of (i) Tenneco, with respect to any coverage or claim for coverage in respect of any Energy Covered Person, (ii) Industrial Company, with respect to any coverage or claim for coverage in respect of any Industrial Covered Person, and (iii) Shipbuilding Company, with respect to any coverage or claim for coverage in respect of any Shipbuilding Covered Person.

4.2 Retained Policies.

(a) *Premiums, Costs and Other Charges.* From and after the Termination Time, all premiums, costs and other charges with respect to any Retained Policy, including claim payments and associated expenses under cost plus or fronting policies, shall be the sole responsibility of and be paid by Tenneco, provided, however, that (i) Industrial Company shall promptly reimburse Tenneco for all such premiums, costs and other charges paid by Tenneco (including amounts paid by Tenneco as reimbursement in respect of amounts drawn under letters of credit maintained by Tenneco pursuant to Section 7.1 hereof) in respect of coverage provided for any Industrial Covered Person to the extent such premiums, costs and other charges exceed the amount of the Claims Deposit, and (ii) Shipbuilding Company shall promptly reimburse Tenneco for all such premiums, costs and other charges paid by Tenneco (including amounts paid by Tenneco as reimbursement in respect of amounts drawn under letters of credit maintained by Tenneco pursuant to Section 7.1 hereof) in respect of coverage provided for any Shipbuilding Covered Person. All amounts refunded from and after the Termination Time by insurance carriers in respect of premiums previously paid under any Retained Policy shall be the sole property of Tenneco, provided, however, that Tenneco shall promptly pay to (i) Industrial Company, all such refunded amounts in respect of coverage provided for any Industrial Covered Person under such Retained Policy, and (ii) Shipbuilding Company, all such refunded amounts in respect of coverage provided for any Shipbuilding Covered Person under such Retained Policy.

(b) *Deductibles, Retentions and Self-Insured Amounts.* From and after the Termination Time, all deductibles, retentions and self-insured amounts with respect to coverage or a claim for coverage under any Retained Policy shall be the sole responsibility of (i) Tenneco, with respect to any coverage or claim for coverage in respect of any Energy Covered Person, (ii) Industrial Company, with respect to any coverage or claim for coverage in respect of any Industrial Covered Person, and (iii) Shipbuilding Company, with respect to any coverage or claim for coverage in respect of any Shipbuilding Covered Person.

4.3 Eastern Policies.

(a) *Premiums in Respect of Eastern Policies.* All amounts refunded from and after the Termination Time by insurance carriers in respect of premiums previously paid under any Eastern Policy shall be the sole property of Tenneco, provided, however, that Tenneco shall promptly pay to (i) Industrial Company, upon receipt thereof from an insurance carrier, the Industrial Group's respective share of any such amounts refunded, and (ii) Shipbuilding Company, upon receipt thereof from an insurance carrier, the Shipbuilding Group's respective share of any such amounts refunded, in each case determined in accordance with Tenneco's historical practices with respect to the allocation of insurance premiums among its Subsidiaries and divisions prior to the date hereof. Each party shall (and shall cause each member of its respective Group over which it has direct or indirect legal or effective control to) promptly pay to any other party any such amounts actually received by it to which such other party is entitled pursuant to this Section 4.3(a).

(b) *Deductibles, Retentions and Self-Insured Amounts.* From and after the Termination Time, all deductibles, retentions and self-insured amounts with respect to coverage or a claim for coverage under any Eastern Policy shall be the sole responsibility of (i) Tenneco, with respect to any coverage or claim for coverage in respect of any Energy Covered Person, (ii) Industrial Company, with respect to any coverage or claim for coverage in respect of any Industrial Covered Person, and (iii) Shipbuilding Company, with respect to any coverage or claim for coverage in respect of any Shipbuilding Covered Person.

(c) *Amounts to be Refunded.* Tenneco shall direct and instruct the Eastern Insurance Provider to pay to Industrial Company in cash promptly after the Termination Time, to the extent permitted by law, and to record a corresponding dollar-for-dollar reduction in all associated liabilities on its books and records for, (i) all amounts which appear as reserves on the books and records of the Eastern Insurance Provider as of the Termination Time in respect of claims relating to any Industrial Covered Person which have been reported prior to the Termination Time, (ii) the full amount of any "incurred but not reported" reserve and any portfolio loss transfer reserve appearing on the books and records of the Eastern Insurance Provider as of the Termination Time under the contingent liability programs of the Eastern Policies, and (iii) 50% of the amount of any "incurred but not reported" reserve appearing on the books and records of the Eastern Insurance Provider as of the Termination Time under the excess liability programs of the Eastern Policies with respect to Industrial and Energy.

4.4 *Exclusive Policies.* From and after the Termination Time, all deductibles, retentions, self-insured amounts, premiums and other costs with respect to any Exclusive Policy or claim for coverage thereunder shall be the sole responsibility of, and all refunded premiums with respect to any Exclusive Policy shall be the sole property of, (i) Tenneco, with respect to any Tenneco Exclusive Policy, (ii) Industrial Company, with respect to any Industrial Exclusive Policy, and (iii) Shipbuilding Company, with respect to any Shipbuilding Exclusive Policy.

4.5 *Excess Costs and Settlements.* Each Covered Person shall be responsible for any excess costs and expenses relating to its respective claims permitted hereunder (or those of any member of its respective Group) under the Common Policies, including defense costs to the extent such defense costs are not covered under such Common Policies, and shall be responsible for obtaining or reviewing the appropriateness of releases upon settlement of such claims.

4.6 *Effect on Other Agreements.* Notwithstanding anything to the contrary contained herein, nothing in this Article IV shall be construed to alter or in any way limit any rights to indemnity provided in the Distribution Agreement or in any other Ancillary Agreement (as such term is defined in the Distribution Agreement).

ARTICLE V ADMINISTRATION

5.1 Occurrence-Based and Claims-Made Policies.

(a) *Administration.* From and after the Distribution Date, Claims Administration and Insurance Administration with respect to the Occurrence-Based Policies and Claims-Made Policies shall be the responsibility of (i) Tenneco, with respect to any coverage or claim for coverage of any Energy Covered Person, (ii) Industrial Company, with respect to any coverage or claim for coverage of any Industrial Covered Person, and (iii) Shipbuilding Company, with respect to any coverage or claim for coverage of any Shipbuilding Covered Person. Each of Shipbuilding Company and Tenneco shall (and shall cause each of its respective Covered Persons over which it has direct or indirect legal or effective control to) provide prompt notice to Industrial Company of all actions taken by it with respect to the Claims Administration and Insurance Administration for the Occurrence-Based Policies and Claims-Made Policies as contemplated by this Section 5.1. Each party hereto shall (and shall cause each other member of its Group over which it has direct or indirect legal or effective control to) take all necessary or appropriate action, if any, to delegate Claims Administration and Insurance Administration with respect to the Occurrence-Based Policies and Claims-Made Policies to any other party who is to assume such responsibilities pursuant hereto and, to the extent such delegation is not permitted by the terms of any such policy, shall engage in Claims Administration or Insurance Administration for any such policy only upon the express authorization and direction of such other party. Each party hereto shall be responsible for its own disbursements and out-of-pocket expenses and the direct and indirect costs of its employees or agents relating to Claims Administration and Insurance Administration contemplated by this Section 5.1. Notwithstanding anything to the contrary contained herein, Industrial Company shall have the right, at its option, to undertake at its own cost and expense Claims Administration and/or Insurance Administration with respect to any coverage or claim for coverage of any Energy Covered Person or Shipbuilding Covered Person.

(b) *Effect of Administrative Responsibilities.* Each of Tenneco, Industrial Company and Shipbuilding Company acknowledges and agrees that each other party's responsibilities under this Section 5.1 for Claims Administration and Insurance Administration shall not relieve any party submitting an insured claim under any Occurrence-Based Policy or Claims-Made Policy of (a) the primary responsibility for reporting such insured claim accurately, completely and in a timely manner, or (b) any other right or responsibility which such party may have pursuant to the terms of any Occurrence-Based Policy or Claims-Made Policy.

5.2 *Eastern and Retained Policies.* From and after the Termination Time, Tenneco shall be solely responsible for Claims Administration and Insurance Administration with respect to the Retained Policies and Eastern Policies including, without limitation, the administration of all billings associated with the Retained

Policies by the insurance carriers thereunder. Notwithstanding the foregoing, each of Industrial Company and Shipbuilding Company shall retain the right to, at its option, direct the management, defense, reporting and settlement of claims involving its respective Covered Persons under the Retained Policies and Eastern Policies.

ARTICLE VI PROCEEDS

6.1 *Occurrence-Based and Claims-Made Policies.* From and after the Distribution Date, Insurance Proceeds received with respect to claims, costs and expenses under the Occurrence-Based Policies and Claims-Made Policies shall be paid to the Covered Person to which such Insurance Proceeds are due pursuant to the terms of such Policies.

6.2 *Eastern and Retained Policies.* From and after the Distribution Date, Insurance Proceeds received with respect to claims, costs and expenses under the Retained Policies and Eastern Policies shall be paid, as appropriate, to the Covered Person to which such Insurance Proceeds are due pursuant to the terms of such Policies.

6.3 *Return of Proceeds.* Each of Tenneco, Industrial Company and Shipbuilding Company shall (and shall cause each of its respective Covered Persons over which it has direct or indirect legal or effective control to) to promptly pay to each other party any Insurance Proceeds actually received by it to which any of such other party's Covered Persons are entitled pursuant hereto, which other party shall then distribute such Insurance Proceeds to the Covered Person to which they are due pursuant hereto.

ARTICLE VII LETTERS OF CREDIT AND SURETY BONDS

7.1 *Maintenance.* (a) *Letters of Credit.* From and after the Distribution Date, to secure obligations under the Retained Policies relating to periods preceding the Termination Time, Tenneco shall, for such time as may be required by law or the terms of any Retained Policy, maintain in full force and effect the letters of credit identified on Schedule 7.1-A hereto or, as necessary or appropriate, substitute therefor and maintain in full force and effect letters of credit acceptable to the insurance carriers and/or surety under the Retained Policies issued by comparably rated lenders containing substantially identical terms and conditions (collectively, the "Letters of Credit"). The parties hereto shall use reasonable commercial efforts to obtain the necessary consents and approvals, and shall thereafter negotiate in good faith an agreement, to allocate the Letters of Credit among the parties hereto such that each party becomes responsible for the maintenance of letters of credit for such time as may be required by law or the terms of any Retained Policy to secure obligations under the Retained Policies relating to periods prior to the Termination Time in respect of coverage afforded thereunder to such party's respective Covered Persons, provided, however, that neither Industrial Company nor Shipbuilding Company shall be required to use such reasonable commercial efforts or negotiate any such agreement if such party determines that the allocation contemplated hereby cannot be accomplished without commercially unreasonable expense.

(b) *Surety Bonds.* The parties hereto acknowledge that Tenneco is obligated to indemnify the sureties under certain performance bonds and other surety instruments that secure obligations of the Energy Business, Energy Group, Industrial Business, Prior Industrial Businesses, Industrial Group, Shipbuilding Business, Prior Shipbuilding Businesses and/or Shipbuilding Group including, but not limited to, the surety instruments identified on Schedule 7.1-B hereto (the "Tenneco-Provided Bonds"). From and after the Termination Time, Tenneco shall maintain such Tenneco-Provided Bonds in place for such time as may be required by law. To the extent possible on commercially reasonable terms, each of Industrial Company and Shipbuilding Company shall use reasonable commercial efforts to obtain a replacement for each Tenneco-Provided Bond that secures obligations of the Industrial Business, Prior Industrial Businesses or Industrial Group (in the case of Industrial Company) or the Shipbuilding Business, Prior Shipbuilding Businesses or Shipbuilding Group (in the case of Shipbuilding Company) and to thereafter arrange for the release of Tenneco from the Tenneco-Provided Bond

which has been so replaced. If the surety under any Tenneco-Provided Bond is required to and does in fact perform according to the terms of said Tenneco-Provided Bond and Tenneco is required to and does in fact indemnify such surety in respect thereof, (i) Industrial Company shall reimburse Tenneco for all amounts actually paid by Tenneco to such surety to the extent such amounts constitute Industrial Liabilities, and (ii) Shipbuilding Company shall reimburse Tenneco for all amounts actually paid by Tenneco to such surety to the extent such amounts constitute Shipbuilding Liabilities.

7.2 Reimbursement for Maintenance Fees. Each of Industrial Company and Shipbuilding Company hereby agrees to reimburse Tenneco annually commencing on _____, 1997 (to be a date as of the end of the thirteenth month following execution hereof) (such date and each anniversary thereof being referred to herein as a "Due Date") for the actual and reasonable administrative fees and expenses paid by Tenneco (the "LC Maintenance Fees") in respect of the issuance and maintenance of the Letters of Credit during the twelve-month period ended 30 days prior to such year's Due Date (each, a "Yearly Period"), to the extent such Letters of Credit secure obligations relating to any Industrial Covered Person or Shipbuilding Covered Person, respectively, under the Retained Policies. The amount of the LC Maintenance Fees for each Yearly Period which shall be the responsibility of Industrial Company and Shipbuilding Company hereunder shall be based on the total outstanding reserves showing on the books and records of CIGNA, as of February 28 during such Yearly Period, for claims by all Industrial Covered Persons, Energy Covered Persons and Shipbuilding Covered Persons under the Retained Policies relating to periods prior to the Termination Time (the "Yearly Total Reserves"). Industrial Company shall reimburse Tenneco hereunder for an amount equal to the LC Maintenance Fees for each Yearly Period multiplied by a fraction, (i) the numerator of which is equal to the outstanding reserves showing on the books and records of CIGNA, as of February 28 during such Yearly Period, for claims by all Industrial Covered Persons under the Retained Policies relating to periods prior to the Termination Time, and (ii) the denominator of which is equal to the Yearly Total Reserves for such Yearly Period. Shipbuilding Company shall reimburse Tenneco hereunder for an amount equal to the LC Maintenance Fees for each Yearly Period multiplied by a fraction, (i) the numerator of which is equal to the outstanding reserves showing on the books and records of CIGNA, as of February 28 during such Yearly Period, for claims by all Shipbuilding Covered Persons under the Retained Policies relating to periods prior to the Termination Time, and (ii) the denominator of which is equal to the Yearly Total Reserves for such Yearly Period.

ARTICLE VIII

MISCELLANEOUS

8.1 Termination. This Agreement may not be terminated except upon the written agreement of each of the parties hereto.

8.2 Further Assurances. If at any time after the Distribution Date any further action is necessary or desirable to carry out the purposes of this Agreement, each of Tenneco, Industrial Company and Shipbuilding Company shall, on the written request of any of them, take (or cause the appropriate member of its Group over which it has direct or indirect legal or effective control to take) all such reasonably necessary or desirable action. If subsequent to the Distribution Date any Policy showing any member of the Energy Group, Industrial Group or Shipbuilding Group, or any of their respective predecessors, as named insured is discovered which was in effect for periods prior to the Termination Time and has not been addressed by the provisions of this Agreement or the Merger Agreement, the parties hereto agree to negotiate in good faith an arrangement with respect to such Policy which shall give, to the fullest extent possible, effect to the purposes of this Agreement and the transactions contemplated by the Distribution Agreement.

8.3 Cooperation. The parties hereto agree to use their reasonable best efforts to cooperate with respect to the various insurance matters contemplated by this Agreement. Each party hereto shall not (and shall not permit any of its respective Covered Persons over which it has legal or effective direct or indirect control to) take any action or permit any inaction that could reasonably be expected to jeopardize or otherwise interfere with the rights of any other party (or any of such other party's respective Covered Persons) hereunder or the ability of

any other party (or any of such other party's respective Covered Persons) to collect any proceeds which might be available under any of the Policies addressed herein in accordance with the terms of this Agreement.

8.4 No Representations and Warranties. The parties hereto understand and agree that no representation or warranty as to the existence, applicability or extent of insurance coverage for Energy, Industrial or Shipbuilding under any Policy is herein being made.

8.5 Limitation on Liability. Except as may be otherwise expressly provided for herein, no party hereto shall be liable hereunder to another party or any of such other party's Covered Persons for claims not reimbursed by insurers for any reason not within the control of such party including, without limitation, coinsurance provisions, deductibles, quota share deductibles, exhaustion of aggregates, self-insured retentions, bankruptcy or insolvency of an insurance carrier, Policy limitations or restrictions, any coverage disputes, any failure to timely claim or any defect in such claim or its processing.

8.6 Successors and Assigns. Except as otherwise expressly provided herein, no party hereto may assign or delegate, whether by operation of law or otherwise, any of such party's rights or obligations under or in connection with this Agreement without the written consent of each other party hereto. No assignment will, however, release the assignor of any of its obligations under this Agreement or waive or release any right or remedy the other parties may have against such assignor hereunder. Except as otherwise expressly provided herein, all covenants and agreements contained in this Agreement by or on behalf of any of the parties hereto will be binding upon and enforceable against the respective successors and assigns of such party and will be enforceable by and will inure to the benefit of the respective successors and permitted assigns of such party.

8.7 Modification; Waiver; Severability. This Agreement may not be amended or modified except in a writing executed by each of the parties hereto. The failure by any party to exercise or a delay in exercising any right provided for herein shall not be deemed a waiver of any right hereunder. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of this Agreement.

8.8 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall constitute an original, but all of which taken together shall constitute one and the same Agreement.

8.9 Descriptive Headings. The descriptive headings of this Agreement are inserted for convenience only and do not constitute a part of this Agreement.

8.10 Notices. All notices, demands or other communications to be given or delivered under or by reason of the provisions of this Agreement shall be in writing and shall be deemed to have been given when delivered personally or five business days after mailing by certified or registered mail, return receipt requested and postage prepaid, to the recipient at such recipient's address as indicated below:

Tenneco Inc.:	1010 Milam Street Houston, TX 77002 Attention: Corporate Secretary
Industrial Company:	1275 King Street Greenwich, CT 06831 Attention: Corporate Secretary
Shipbuilding Company:	4101 Washington Avenue Newport News, VA 23607 Attention: Corporate Secretary

or to such other address or to the attention of such other person as the recipient party has specified by prior written notice to the sending party.

8.11 *Survival.* Each of the agreements of the parties herein shall survive the Distribution Date.

8.12 *No Third Party Beneficiaries.* This Agreement is made solely for the benefit of the parties hereto and their respective Covered Persons, and shall not give rise to any rights of any kind to any other third parties.

8.13 *Other.* ALL QUESTIONS AND/OR DISPUTES CONCERNING THE CONSTRUCTION, VALIDITY AND INTERPRETATION OF THIS AGREEMENT SHALL BE GOVERNED BY THE INTERNAL LAWS, AND NOT THE LAW OF CONFLICTS, OF THE STATE OF DELAWARE. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY AND UNCONDITIONALLY AGREES TO BE SUBJECT TO, AND HEREBY CONSENTS AND SUBMITS TO, THE JURISDICTION OF THE COURTS OF THE STATE OF DELAWARE AND OF THE FEDERAL COURTS SITTING IN THE STATE OF DELAWARE. This Agreement, together with the Distribution Agreement and other Ancillary Agreements (as such term is defined in the Distribution Agreement), constitutes the entire agreement and supersedes all other prior and contemporaneous agreements and undertakings, both written and oral, among the parties with respect to the subject matter hereof.

8.14 *Sole Agent.* In all matters relating to this Agreement, including the resolution of any disputes relating to this Agreement between any members of different Groups, (i) Tenneco shall be the sole agent for the members of the Energy Group, (ii) Industrial Company shall be the sole agent for the members of the Industrial Group, and (iii) Shipbuilding Company shall be the sole agent for members of the Shipbuilding Group. No member of any Group shall have any authority to represent itself in any such matter or to terminate such agency without the prior written consent of each party hereto.

8.15 *No Double Recovery.* No provision of this Agreement shall be construed to provide recovery to any Person for any costs, expenses or other amounts for which such Person has been fully compensated under any other provision of this Agreement, any other agreement or otherwise.

IN WITNESS WHEREOF, the parties have made and entered into this Insurance Agreement as of the date first set forth above.

TENNECO INC.

By: _____

Name: _____

Title: _____

NEW TENNECO INC.

By: _____

Name: _____

Title: _____

NEWPORT NEWS SHIPBUILDING INC.

By: _____

Name: _____

Title: _____

SCHEDULE A
TO INSURANCE AGREEMENT
Current Claims-Made Policies

See attached (to be updated and made current as of the signing of the Insurance Agreement).

SCHEDULE B
TO INSURANCE AGREEMENT
Current Occurrence-Based Policies

See attached (to be updated and made current as of the signing of the Insurance Agreement). To the extent a policy listed herein has expired, this schedule shall be deemed to refer to the successor policy thereto.

**SCHEDULE C
TO INSURANCE AGREEMENT**

Eastern Policies

(to be updated and made current as of the signing of the Insurance Agreement)

Eastern Insurance Company Limited Policy Number 95ED2501

Eastern Insurance Company Limited Contingent Liability Policies (policy numbers not currently available)

SCHEDULE D
TO INSURANCE AGREEMENT
Current Retained Policies

See attached (to be updated and made current as of the signing of the Insurance Agreement).

SCHEDULE E
TO INSURANCE AGREEMENT
Current Tenneco Exclusive Policies

See attached (to be updated and made current as of the signing of the Insurance Agreement). To the extent a policy noted herein has expired, this schedule shall be deemed to refer to the successor policy thereto.

SCHEDULE 2.1-A
TO INSURANCE AGREEMENT
Transferred Occurrence-Based Policies

To be determined by Tenneco prior to execution of Insurance Agreement.

SCHEDULE 2.1-B
TO INSURANCE AGREEMENT
Cancelled Occurrence-Based Policies

To be determined by Tenneco prior to execution of Insurance Agreement.

SCHEDULE 2.2-A
TO INSURANCE AGREEMENT
Transferred Claims-Made Policies

To be determined by Tenneco prior to execution of Insurance Agreement.

SCHEDULE 2.2-B
TO INSURANCE AGREEMENT
Cancelled Claims-Made Policies

To be determined by Tenneco prior to execution of Insurance Agreement.

SCHEDULE 7.1-A
TO INSURANCE AGREEMENT
Letters of Credit Currently in Place

Tenneco Inc. is presently maintaining letters of credit totalling approximately \$45 million to secure its obligations under the Retained Policies. The letters of credit in effect as of the Distribution Date will be listed hereon.

SCHEDULE 7.1-B
TO INSURANCE AGREEMENT
Surety Bonds Currently in Place

Tenneco Inc. is presently obligated to indemnify the surety under various performance bonds and other surety instruments which secure obligations relating to Energy, Industrial and/or Shipbuilding. Bidder has been provided a current list thereof. Such surety bonds in effect as of the Distribution Date will be listed hereon.

SCHEDULE A

<u>Type of Coverage</u>	<u>Policy Number</u>	<u>Policy Dates</u>	<u>Underwriter</u>	<u>Limits</u>	<u>Deductibles</u>
Excess Liability	XLUMB 00912	9/1/95-96	XL Insurance Company Bermuda	\$100,000,000 xs \$100,000,000	
Excess Liability	UO5138609	9/1/95-96	OCIL		
Excess Liability	TGT 5035/4	9/1/95-96	ACE Insurance Company—Bermuda	\$200,000,000 xs \$300,000,000	
Fiduciary Liability	NIA 0120995-96 71FF 101007525BCM 8141-48-49-A	3/1/96-97	Reliance Aetna Federal	\$50,000,000	\$500,000
ERISA Bond (Crime)	445-71-61	9/1/95-96	National Union Fire (AIG)	\$15,000,000	NIL

SCHEDULE B

Type of Coverage	Policy Number	Policy Dates	Underwriters	Limits	Deductibles
Excess Liability	DL039795	9/1/95-96	Gerling-Konzern	\$10,000,000 xs \$10,000,000	
Excess Liability	BE8180249RA	9/1/95-96	American International (AIG)	\$25,000,000 xs \$20,000,000	
Excess Liability	95ER2501	9/1/95-96	Eastern Insurance Co. (Front for AME Re)	\$10,000,000 p/o \$55,000,000 xs \$45,000,000	
Excess Liability	8784725	9/1/95-96	Lexington	\$5,000,000 p/o \$55,000,000 xs \$45,000,000	
Excess Liability	CSR2839501	9/1/95-96	Fireman's Fund	\$20,000,000 p/o \$55,000,000 xs \$45,000,000	
Excess Liability	EU 08355330	9/1/95-96	Steadfast Zurich	\$20,000,000 p/o \$55,000,000 xs \$45,000,000	
Automobile—Mexico	HLN 00261	1/1/96-97	Serguros Commercial America	BI:\$30,000/\$60,000 PD:\$30,000	
Aviation Hull & Liability	87BVH-153922	7/1/94-97	Associated Aviation Underwriters	\$100,000,000 Per Occurrence	
Ocean Cargo	EIPH1006	7/1/94-96	ESIS International, Inc.	\$10,000,000 One Conveyance	\$10,000,000 Per Occurrence
All Risk Property Damage/Business Interruption (USA/Canada)	213601-95	6/1/95-96	Protection Mutual	\$10,318,608,000 Blanket Per Occurrence	\$5,000,000 Per Occurrence
All Risk Property Damage/Business Interruption (International)	TBD	6/1/95-96	Royal Insurance	\$1,771,781,531 Blanket Per Occurrence	\$75,000 PD \$150,000 BI Per Occurrence
Comprehensive Boiler & Machinery Property Damage/ Business Interruption	BMI-SA- 9138264-20	11/1/95-96	Hartford Steam Boiler	\$100,000,000 Per Accident	\$5,000,000 Any One Accident
Foreign Public & Products Liability Insurance (Primary Cover)	62/99102/D	9/1/95-96	Gerling-Konzern	\$2,000,000 Per Occurrence	\$5,000 Per Claim \$50,000 Pollution
Umbrella Excess Liability	W51010	9/1/95-96	Winterthur (Front for Eastern Insurance Company)	\$8,000,000 Any One Occurrence xs \$2,000,000	

SCHEDULE D

<u>Type of Coverage</u>	<u>Policy Number</u>	<u>Policy Dates</u>	<u>Underwriter</u>	<u>Limits</u>	<u>Deductibles</u>
Workers' Compensation Texas—Ded	CCSC6162624	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000
Workers' Compensation NE—Ded	WLRC36163008	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000
Workers' Compensation Other States—Ded	WLRC36162600	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000
Workers' Compensation Retro	CCSC36162624	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000
Workers' Compensation Maine	1810017884	9/1/95-96	Maine Employers Mutual	\$100,000/\$500,000/ \$100,000	\$5,000
General Liability	HDOG13214001	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000
Automobile Liability	ISA042952	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000
Environmental	HDCG13214013	9/1/95-96	CIGNA	\$1,000,000	\$1,000,000
Automobile—Canada	CAC391021	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000
General Liability—Canada	CGL23835	9/1/95-96	CIGNA	\$2,000,000	\$2,000,000

SCHEDULE E

<u>Type of Coverage</u>	<u>Policy Number</u>	<u>Policy Dates</u>	<u>Underwriter</u>	<u>Limits</u>	<u>Deductibles</u>
Tenneco Gas Production General Liability	JHB 503266	6/19/95-96	Sphere Drake	\$1,000,000	\$5,000 Land \$10,000 Offshore
Tenneco Gas Production Excess Liability	JHB 000297	6/19/95-96	Commercial Underwriters Ins. Co.	\$5,000,000 xs \$1,000,000	
Tenneco Gas South Australia Construction Risk Liability	62/900194/D	7/24/95-1/24/97	Gerling Konzern	\$2,000,000	\$10,000
Tenneco Gas Australia Construction Risk Liability	CXC 042840	7/24/95-1/24/97	CIGNA	\$8,000,000 xs \$2,000,000	
Railroad Protective Bessemer & Lake Erie RR Co.	HDOG 13214025	8/1/95-96	CIGNA	\$2,000,000/ \$6,000,000	\$2,000,000/ \$6,000,000
Railroad Protective Boston & Marine Corp.	ORPG 13214037	8/1/95-96	CIGNA	\$2,000,000/ \$6,000,000	\$2,000,000/ \$6,000,000
Railroad Protective National RR Passenger Corp. (AMTRAK)	ORP G18967923	4/8/96-97	CIGNA	\$2,000,000/ \$6,000,000	\$2,000,000/ \$6,000,000
Railroad Protective Massachusetts Bay Transp.	ORP G18967881	4/8/96-97	CIGNA	\$2,000,000/ \$6,000,000	\$2,000,000/ \$6,000,000
Michigan Production Company	BE 9320742	4/26/96-97	National Union Fire Ins. Co. (AIG)	\$10,000,000	\$500,000
Owners & Contractors Protective Liability	OCPG 14231298	10/10/95-96	CIGNA	\$500,000/ \$500,000	\$500,000/ \$500,000
Shore Property/OEE Package Sec. IA & B—Offshore Prop. Sec. II—OEE Sec. III—Charterer's Liab.	MMA 95-126	7/27/95-96	Sec. IA UNI 25.0% Gjensidige 15.0% Vesta 15.0% Protector 10.5% Commonwealth 3.0% Hull & Co. 5.0% C.T. Bowring 26.5% Sec. IB, II, & III Gjensidige 17.5% Vesta 15.0% Protector 16.0% Commonwealth 20.0% Hull & Co. 5.0% C.T. Bowring 26.5%	Sec. IA — Per Schedule Sec. IB — Per Schedule Sec. II OEE \$50,000,000 OCSLA \$35,000,000 CCC \$5,000,000 Sec. III — \$1,000,000	Sec. IA — \$5,000,000 Assured's Int. AOO Sec. IB — \$1,000,000 (100%) AOO Sec. II — \$200,000 (100%) AOO OCSLA \$200,000 (100%) Per Occ. CCC \$200,000 (100%) Per Occ. Sec. III — \$50,000 (100%) AOO
Construction All Risk	HG 015595	10/5/95-10/1/96	National Vulcan Cornhill Ins. SR International Royal Insurance Global Generali SCOR	Aus. \$209,032,000	Aus. \$30,000 All Perils except: Aus. \$250,000 Windstorm, Flood, and Earth Movement

<u>Type of Coverage</u>	<u>Policy Number</u>	<u>Policy Dates</u>	<u>Underwriter</u>	<u>Limits</u>	<u>Deductibles</u>
Worker's Compensation South Australia	Employer No. E 1344308		TBD	TBD	
Employer Cost Control Insurance	CPA 000134	7/31/95-96	CIGNA	Maximum Weekly Benefit: \$500	
Professional Indemnity	9517VK18625	7/28/95-96	HIH Casualty & General Insurance Ltd.	TBD	A \$20,000 each and every claim
Motor Vehicle	MV 452743	7/31/95-96	CIC Insurance		Own Damage: \$24,000
					T/P Claim: \$1,000 Each and Every Claim
Personal Accident Insurance	5 011 9265	9/1/95-96	CIGNA	Personal Accident: GBP 2,500,000 Any One Claim or Series of Claims Arising Out of Single Incident GBP 900,000 Per Person Any One Claim Medical Expenses: GBP 75,000 Per Event and Per Person Increased to GBP 500,000 Per Event and Per Person for Claims Arising in USA/Canada Rescue Unlimited	

**EXHIBIT I TO
DISTRIBUTION AGREEMENT**

**SHIPBUILDING BUSINESS
PRO FORMA BALANCE SHEET
June 30, 1996
(UNAUDITED)
(MILLIONS)**

<u>ASSETS</u>	<u>Company Historical</u>	<u>Pro Forma Adjustments</u>	<u>Pro Forma Combined</u>
Current Assets			
Cash and cash equivalents	\$ 1	\$ 4 ^(a) 614 ^(b) (614) ^(d)	\$ 5
Contracts in process	282		282
Other current assets	190		190
Total current assets	<u>473</u>	<u>4</u>	<u>477</u>
Noncurrent Assets			
Property, plant and equipment, net	824		824
Other assets	155	(9) ^(c) 14 ^(d)	160
Total noncurrent assets	<u>979</u>	<u>5</u>	<u>984</u>
	<u>\$1,452</u>	<u>\$ 9</u>	<u>\$1,461</u>
 <u>LIABILITIES AND EQUITY</u>			
Current Liabilities			
Accounts payable	\$ 177	\$ (73) ^(c)	\$ 104
Short-term debt	95	28 ^(b) (95) ^(c)	28
Other accrued liabilities	160		160
Total current liabilities	<u>432</u>	<u>(140)</u>	<u>292</u>
Noncurrent Liabilities			
Long-term debt	282	586 ^(b) (282) ^(c)	586
Deferred income taxes	140		140
Other long-term liabilities	249		249
Total noncurrent liabilities	<u>671</u>	<u>304</u>	<u>975</u>
Equity			
Common stock		1 ^(f)	1
Paid-in capital		193 ^(f)	193
Retained earnings		— ^(f)	—
Combined equity	349	4 ^(a) 64 ^(c) (600) ^(d) 377 ^(e) (194) ^(f)	—
Total equity	<u>349</u>	<u>(155)</u>	<u>194</u>
	<u>\$1,452</u>	<u>\$ 9</u>	<u>\$1,461</u>

See the accompanying notes to Unaudited Pro Forma Combined Financial Statements.

SHIPBUILDING BUSINESS
NOTES TO PRO FORMA BALANCE SHEET

- (a) To reflect a cash contribution from Tenneco to the Company pursuant to the Cash Realignment provisions in the Distribution Agreement covering the Shipbuilding Distribution.
- (b) To reflect \$614 million in total borrowings under various credit facilities which borrowings will consist of (i) a \$200 million six-year amortizing Term Loan with an estimated annual interest rate of 8%, (ii) \$200 million Senior Notes due 2006 with an estimated annual interest rate of 9.25%, (iii) \$200 million Senior Subordinated Notes due 2006 with an estimated annual interest rate of 9.75%, and (iv) \$14 million in borrowings under a \$215 million six-year Revolving Credit Facility, with an estimated annual interest rate of 8% and commitment fees due on the unused portion of the facility, for payment of certain fees and expenses described in (d) below. Approximately \$28 million of the assumed Term Loan borrowings will mature within one year from the consummation of the Transaction, and such amount is reflected as short-term debt in the accompanying Pro Forma Combined Balance Sheet.
- (c) To reflect the settlement or capitalization of intercompany accounts payable with Tenneco affiliates and the transfer of certain assets prior to the Shipbuilding Distribution pursuant to certain Corporate Restructuring Transactions.
- (d) To reflect: (i) a cash dividend of \$600 million to be paid by the Company to Tenneco or one or more of its subsidiaries, principally using borrowings under the Senior Credit Facility and the Notes and (ii) a payment of \$14 million for certain fees and expenses in connection with the Senior Credit Facility and Notes.
- (e) To reflect the elimination of corporate debt and related interest expense allocated by Tenneco to the Company. See the Combined Financial Statements, and notes thereto, included elsewhere in this Information Statement.
- (f) To reflect the distribution of NNS Common Stock to holders of Tenneco Common Stock at an exchange ratio of one share of NNS Common Stock for five shares of Tenneco Common Stock.
- (g) To reflect: (i) interest expense related to the borrowings assumed outstanding under the Senior Credit Facility and the Notes at the assumed annual interest rates discussed in (b), (ii) the cost of commitment fees on the unused borrowing capacity under the Revolving Credit Facility, and (iii) the amortization of deferred debt financing costs incurred in connection with the Senior Credit Facility and the Notes, as well as the related tax effects of these items at an assumed statutory rate of 35%. A ¼% change in these assumed annual interest rates would change pro forma annual interest expense by \$0.8 million, before the effect of income taxes.
- (h) EBITDA, on a pro forma basis, was \$113 million and \$227 million for the six months ended June 30, 1996 and the year ended December 31, 1995, respectively. EBITDA represents earnings before cumulative effect of changes in accounting principles, income taxes, interest expense and depreciation and amortization. EBITDA is not a calculation based upon GAAP; however, the amounts included in the EBITDA calculation are derived from amounts included in the combined pro forma Statements of Earnings. In addition, EBITDA shall not be considered as an alternative to net income or operating income, as an indicator of the operating performance of the Company or as an alternative to operating cash flows as a measure of liquidity.

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**EXHIBIT J
TO
DISTRIBUTION AGREEMENT
SHIPBUILDING SUBSIDIARIES**

Subsidiaries of Tenneco InterAmerica Inc. (Delaware)	
Newport News Shipbuilding and Dry Dock Company (Virginia)	100%
Asheville Industries Inc. (North Carolina)	100
Greeneville Industries Inc. (Virginia)	100
Newport News Global Corporation (U.S. Virgin Islands)	100
Newport News Industrial Corporation (Virginia)	100
Newport News Industrial Corporation of Ohio (Ohio)	100
Newport News Reactor Services, Inc. (Virginia)	100
Tenneco Tanker Holding Corporation (Delaware)	100
The James River Oyster Corporation (Virginia)	100

74

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EXHIBIT K
TO
DISTRIBUTION AGREEMENT
TAX SHARING AGREEMENT

among

Tenneco Inc.,

New Tenneco Inc.,

Newport News Shipbuilding Inc.,

and

El Paso Natural Gas Company

TABLE OF CONTENTS

	<u>Page</u>
SECTION 1. Definition of Terms	1
SECTION 2. Allocation of Tax Liabilities	6
SECTION 3. Proration of Taxes for Straddle Periods.....	10
SECTION 4. Preparation and Filing of Tax Returns.....	10
SECTION 5. Tax Payments and Intercompany Billings.....	13
SECTION 6. Tax Benefits	16
SECTION 7. Assistance and Cooperation	17
SECTION 8. Tax Records	17
SECTION 9. Tax Contests	18
SECTION 10. Effective Date; Termination of Prior Intercompany Tax Allocation Agreements.....	19
SECTION 11. No Inconsistent Actions	19
SECTION 12. Survival of Obligations	19
SECTION 13. Employee Matters	20
SECTION 14. Treatment of Payments; Tax Gross Up	20
SECTION 15. Disagreements	20
SECTION 16. Late Payments	20
SECTION 17. Expenses	21
SECTION 18. Special Rules for Determining Members of Groups.....	21
SECTION 19. General Provisions	21

TAX SHARING AGREEMENT

This Agreement is entered into as of October 31, 1996 by and between Tenneco Inc., a Delaware corporation ("Tenneco"), Newport News Shipbuilding Inc. (formerly known as Tenneco InterAmerica Inc.), a Delaware corporation ("Shipbuilding Company"), New Tenneco Inc., a Delaware corporation ("Industrial Company"), and El Paso Natural Gas Company, a Delaware corporation ("Acquiror"). Tenneco, Shipbuilding Company, and Industrial Company are sometimes collectively referred to herein as the "Companies." Capitalized terms used in this Agreement are defined in Section 1 below. Unless otherwise indicated, all "Section" references in this Agreement are to sections of this Agreement.

RECITALS

WHEREAS, as of the date hereof, Tenneco is the common parent of an affiliated group of corporations, including Shipbuilding Company and Industrial Company, which has elected to file consolidated Federal income tax returns; and

WHEREAS, the Companies have entered into a Distribution Agreement setting forth the corporate transactions pursuant to which Tenneco will distribute all of the outstanding shares of common stock of Shipbuilding Company and all of the outstanding shares of common stock of Industrial Company to Tenneco shareholders in transactions intended to qualify as tax-free distributions under Section 355 of the Code (as defined below); and

WHEREAS, as a result of the Distributions, Shipbuilding Company and Industrial Company, and their respective subsidiaries, will cease to be members of the affiliated group of which Tenneco is the common parent, effective as of the Distribution Date; and

WHEREAS, the Companies desire to provide for and agree upon the allocation between the parties of liabilities for Taxes arising prior to, as a result of, and subsequent to the transactions contemplated by the Distribution Agreement, and to provide for and agree upon other matters relating to Taxes;

NOW THEREFORE, in consideration of the mutual agreements contained herein, the Companies hereby agree as follows:

SECTION 1. Definition of Terms. For purposes of this Agreement (including the recitals hereof), the following terms have the following meanings:

"Accounting Cutoff Date" means, with respect to each of Shipbuilding Company and Industrial Company, any date as of the end of which there is a closing of the financial accounting records for such entity.

"Accounting Firm" shall have the meaning provided in Section 15.

"Acquiror" means El Paso Natural Gas Company, a Delaware corporation, and any successor.

"Adjustment Request" means any formal or informal claim or request filed with any Tax Authority, or with any administrative agency or court, for the adjustment, refund, or credit of Taxes, including (a) any amended Tax return claiming adjustment to the Taxes as reported on the Tax Return or, if applicable, as previously adjusted, or (b) any claim for refund or credit of Taxes previously paid.

"Affiliate" means any entity that directly or indirectly is "controlled" by the person or entity in question. "Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a person, whether through ownership of voting securities, by contract or otherwise. Except as otherwise provided herein, the term Affiliate shall refer to Affiliates of a person as determined immediately after the Distributions.

"Agreement" shall mean this Tax Sharing Agreement.

"Allocated Federal Tax Liability" shall have the meaning provided in Section 5.01(b)(i).

"Base Amount Adjustment Items" means any Tax Items arising from the amounts described in clause (i)(A) of the definition of Base Amount in the Debt and Cash Allocation Agreement attached as Exhibit C to the Distribution Agreement (relating to gas supply realignment costs and recoveries of such costs) or in clause (i)(C) of such definition of Base Amount (relating to payments made in settlement of any significant Energy Liability (as defined in the Merger Agreement)), and any Tax Items related to such amounts (such as income accrued with respect to payments to be received after the Distribution Date from customers, insurers, or other third parties with respect to gas supply realignment costs or settlements of Energy Liabilities).

"Carryback" means any net operating loss, net capital loss, excess tax credit, or other similar Tax item which may or must be carried from one Tax Period to another Tax Period under the Code or other applicable Tax Law.

"Code" means the U.S. Internal Revenue Code of 1986, as amended, or any successor law.

"Companies" means Tenneco, Shipbuilding Company, and Industrial Company, collectively, and **"Company"** means any one of Tenneco, Shipbuilding Company, or Industrial Company.

"Consolidated or Combined Income Tax" means any Income Tax computed by reference to the assets and activities of members of more than one Group.

"Consolidated or Combined State Income Tax" means any State Income Tax computed by reference to the assets and activities of members of more than one Group.

"Consolidated Tax Liability" means, with respect to any Tenneco Federal Consolidated Return, the "tax liability of the group" as that term is used in Treasury Regulation Section 1.1552-1(a)(1) (including applicable interest, additions to the tax, additional amounts, and penalties as provided in the Code), adjusted as follows:

- (i) such tax liability shall be treated as including any alternative minimum tax liability under Code Section 55;

- (ii) in the case of the Tax Period which includes the Distribution Date, the Consolidated Tax Liability shall be computed as if the Distribution Date were the last day of the Tax Period; and

- (iii) Base Amount Adjustment Items and Debt Discharge Items shall be disregarded.

"Cumulative Federal Tax Payment" shall have the meaning provided in Section 5.01(b)(ii).

"Debt Discharge Items" means any Tax Items arising from the Debt Realignment (as defined in the Merger Agreement).

"Distribution Agreement" means the agreement, as amended from time to time, setting forth the corporate transactions required to effect the distribution to Tenneco shareholders of Shipbuilding Common Shares and Industrial Common Shares, and to which this Tax Sharing Agreement is attached as an exhibit.

"Distribution Date" means the Distribution Date as that term is defined in the Distribution Agreement.

"Distributions" means the distributions to Tenneco shareholders on the Distribution Date of all of the outstanding stock of Industrial Company and Shipbuilding Company owned by Tenneco.

"Effective Time" shall have the meaning provided in the Merger Agreement.

"Energy Investments Group" means the corporations, or divisions of corporations, identified on Schedule 3.

"Federal Allocation Method" shall have the meaning provided in Section 2.02(a).

"Federal Income Tax" means any Tax imposed by Subtitle A or F of the Code.

"Federal Tax Adjustment" shall have the meaning provided in Section 2.02(b).

"Foreign Income Tax" means any Tax imposed by any foreign country or any possession of the United States, or by any political subdivision of any foreign country or United States possession, which is an income tax as defined in Treasury Regulation Section 1.901-2.

"Group" means the Tenneco Group, the Shipbuilding Group, and the Industrial Group, as the context requires.

"GSR Items" means, for any Tax Period: (a) the deductions or losses allowable in such Tax Period attributable to (i) the payment of gas supply realignment costs as described in clause (i) of the definition of Base Amount in the Debt and Cash Allocation Agreement attached as Exhibit C to the Distribution Agreement, or (ii) the payment in any Post-Distribution Tax Period of gas supply realignment costs incurred pursuant to contracts entered into on or prior to the Distribution Date; and (b) any taxable income or gain recognized in such Tax Period attributable to the recovery of such costs from customers, insurers, or third parties or attributable to any reduction in any previously deducted payments.

"Income Tax" means any Federal Income Tax, State Income Tax, or Foreign Income Tax.

"Industrial Adjustment" means any proposed adjustment by a Tax Authority or claim for refund asserted in a Tax Contest to the extent Industrial Company would be exclusively liable for any resulting Tax under this Agreement and exclusively entitled to receive any resulting Tax Benefit under this Agreement. For purposes of this Agreement, any proposed adjustment relating to Tenneco Business Services Inc. (or the predecessor shared services project of Tenneco) shall be an Industrial Adjustment, and Industrial Company shall be liable for any Taxes (and shall be entitled to receive any Tax Benefit) arising from such adjustments.

"Industrial Company" means New Tenneco Inc., a Delaware corporation, and any successor.

"Industrial Group" means Industrial Company and its Affiliates as determined immediately after the Distributions, modified as provided in Section 18.

"Industrial Group Prior Federal Tax Liability" shall have the meaning provided in Section 2.02(b)(ii).

"Industrial Group Prior State Tax Liability" shall have the meaning provided in Section 2.03(b)(ii)(B).

"Industrial Group Recomputed Federal Tax Liability" shall have the meaning provided in Section 2.02(b)(i).

"Industrial Group Recomputed State Tax Liability" shall have the meaning provided in Section 2.03(b)(ii)(A).

"Joint Adjustment" means any proposed adjustment by a Tax Authority or claim for refund asserted in a Tax Contest which is neither an Industrial Adjustment, a Shipbuilding Adjustment, nor a Tenneco Adjustment.

"Merger" means the merger of El Paso Merger Company with and into Tenneco as described in the Merger Agreement.

"Merger Agreement" means the Agreement and Plan of Merger among Tenneco, Acquiror, and El Paso Merger Company dated as of June 19, 1996, as amended from time to time.

"Payment Date" means (i) with respect to any Tenneco Federal Consolidated Return, the due date for any required installment of estimated taxes determined under Code Section 6655, the due date (determined without regard to extensions) for filing the return determined under Code Section 6072, and the date the return is filed,

and (ii) with respect to any Tax Return for any Consolidated or Combined State Income Tax, the corresponding dates determined under the applicable Tax Law.

"Post-Distribution Period" means any Tax Period beginning after the Distribution Date, and, in the case of any Straddle Period, the portion of such Straddle Period beginning the day after the Distribution Date.

"Pre-Distribution Period" means any Tax Period ending on or before the Distribution Date, and, in the case of any Straddle Period, the portion of such Straddle Period ending on the Distribution Date.

"Prime Rate" means the base rate on corporate loans charged by Citibank, N.A., New York, New York from time to time, compounded daily on the basis of a year of 365 or 366 (as applicable) days and actual days elapsed.

"Prior Intercompany Tax Allocation Agreements" means any written or oral agreement or any other arrangements relating to allocation of Taxes existing between or among the Tenneco Group, the Shipbuilding Group, and the Industrial Group as of the Distribution Date (other than this Agreement and other than any such agreement or arrangement between or among persons who are members of a single Group). The following agreements, including any amendments thereto, shall not be considered a Prior Intercompany Tax Allocation Agreement: (i) the agreement by and between Tenneco and Case Equipment Corporation (now known as Case Corporation) dated June 23, 1994; (ii) the agreement by and among Tenneco, Tenneco United Kingdom Holdings Limited, and Albright and Wilson plc dated February 16, 1995; and (iii) the agreement by and between Tennessee Gas Pipeline Company, Tenneco Gas Marketing Company, and IGC Energy, Inc. dated November 1, 1995.

"Prohibited Action" shall have the meaning provided in Section 11.

"Responsible Company" means, with respect to any Tax Return, the Company having responsibility for preparing and filing such Tax Return under this Agreement.

"Restructuring Tax" means the Taxes described in Sections 2.06(a)(ii) or 2.06(a)(iii) (relating to Tax resulting from any income or gain recognized as a result of the Transactions).

"Ruling Request" means the letter filed by Tenneco with the Internal Revenue Service requesting a ruling from the Internal Revenue Service regarding certain tax consequences of the Transactions (including all attachments, exhibits, and other materials submitted with such ruling request letter) and any amendment or supplement to such ruling request letter.

"Separate Company Tax" means any Tax computed by reference to the assets and activities of a member or members of a single Group.

"Shipbuilding Adjustment" means any proposed adjustment by a Tax Authority or claim for refund asserted in a Tax Contest to the extent Shipbuilding Company would be exclusively liable for any resulting Tax under this Agreement and exclusively entitled to receive any resulting Tax Benefit under this Agreement.

"Shipbuilding Company" means Newport News Shipbuilding Inc. (formerly known as Tenneco InterAmerica Inc.), a Delaware corporation, and any successor.

"Shipbuilding Group" means Shipbuilding Company and its Affiliates as determined immediately after the Distributions, modified as provided in Section 18.

"Straddle Period" means any Tax Period that begins on or before and ends after the Distribution Date.

"State Income Tax" means any Tax imposed by any State of the United States or by any political subdivision of any such State which is imposed on or measured by net income, including state and local franchise or similar Taxes measured by net income.

"Tax" or "Taxes" means any income, gross income, gross receipts, profits, capital stock, franchise, withholding, payroll, social security, workers compensation, unemployment, disability, property, ad valorem, stamp, excise, severance, occupation, service, sales, use, license, lease, transfer, import, export, value added, alternative minimum, estimated or other similar tax (including any fee, assessment, or other charge in the nature of or in lieu of any tax) imposed by any governmental entity or political subdivision thereof, and any interest, penalties, additions to tax, or additional amounts in respect of the foregoing.

"Tax Authority" means, with respect to any Tax, the governmental entity or political subdivision thereof that imposes such Tax, and the agency (if any) charged with the collection of such Tax for such entity or subdivision.

"Tax Benefit" means any refund, credit, or other reduction in otherwise required Tax payments (including any reduction in estimated tax payments).

"Tax Contest" means an audit, review, examination, or any other administrative or judicial proceeding with the purpose or effect of redetermining Taxes of any of the Companies or their Affiliates (including any administrative or judicial review of any claim for refund) for any Tax Period ending on or before the Distribution Date or any Straddle Period.

"Tax Contest Committee" shall have the meaning provided in Section 9.02(b).

"Tax Item" means, with respect to any Income Tax, any item of income, gain, loss, deduction, and credit.

"Tax Law" means the law of any governmental entity or political subdivision thereof relating to any Tax.

"Tax Opinion" means the opinion letter to be issued by Tenneco's tax counsel as required by the Merger Agreement, a form of which is attached as Exhibit K of the Merger Agreement.

"Tax Period" means, with respect to any Tax, the period for which the Tax is reported as provided under the Code or other applicable Tax Law.

"Tax Records" means Tax Returns, Tax Return workpapers, documentation relating to any Tax Contests, and any other books of account or records required to be maintained under the Code or other applicable Tax Laws or under any record retention agreement with any Tax Authority.

"Tax Return" means any report of Taxes due, any claims for refund of Taxes paid, any information return with respect to Taxes, or any other similar report, statement, declaration, or document required to be filed under the Code or other Tax Law, including any attachments, exhibits, or other materials submitted with any of the foregoing, and including any amendments or supplements to any of the foregoing.

"Tenneco" means Tenneco Inc., a Delaware corporation, and any successor.

"Tenneco Adjustment" means any proposed adjustment by a Tax Authority or claim for refund asserted in a Tax Contest to the extent Tenneco would be exclusively liable for any resulting Tax under this Agreement and exclusively entitled to receive any resulting Tax Benefit under this Agreement.

"Tenneco Federal Consolidated Return" means any United States federal Tax Return for the affiliated group (as that term is defined in Code Section 1504) that includes Tenneco as the common parent and includes any member of the Shipbuilding Group or the Industrial Group.

"Tenneco Group" means Tenneco and its Affiliates, excluding any entity that is a member of the Industrial Group or the Shipbuilding Group.

"Transactions" means the transactions contemplated by the Distribution Agreement (including the Corporate Restructuring Steps and Distributions, as defined in such agreement) and by the Merger Agreement (including the Debt Realignment, as defined in such agreement).

"Treasury Regulations" means the regulations promulgated from time to time under the Code as in effect for the relevant Tax Period.

SECTION 2. Allocation of Tax Liabilities. The provisions of this Section 2 are intended to determine each Company's liability for Taxes with respect to Pre-Distribution Periods. Once the liability has been determined under this Section 2, Section 5 determines the time when payment of the liability is to be made, and whether the payment is to be made to the Tax Authority directly or to another Company.

2.01 General Rule

(a) *Tenneco Liability.* Tenneco shall be liable for all Taxes not specifically allocated to either Industrial Company or Shipbuilding Company under this Section 2. Tenneco shall indemnify and hold harmless the Industrial Group and the Shipbuilding Group from and against any liability for Taxes which Tenneco is liable for under this Section 2.01(a).

(b) *Industrial Company Liability.* Industrial Company shall be liable for, and shall indemnify and hold harmless the Tenneco Group and the Shipbuilding Group from and against any liability for, Taxes which are allocated to Industrial Company under this Section 2.

(c) *Shipbuilding Company Liability.* Shipbuilding Company shall be liable for, and shall indemnify and hold harmless the Tenneco Group and the Industrial Group from and against any liability for, Taxes which are allocated to Shipbuilding Company under this Section 2.

2.02 Allocation of United States Federal Income Tax. Except as provided in Sections 2.06, 6.02, and 6.03:

(a) *Allocation of Tax Relating to Tenneco Federal Consolidated Returns Filed After the Distribution Date.* With respect to any Tenneco Federal Consolidated Return filed after the Distribution Date, the Consolidated Tax Liability shall be allocated among the Groups in accordance with the method prescribed in Treasury Regulation Section 1.1552-1(a)(1) (as in effect on the date hereof) determined by treating each Group as a single member of the consolidated group and by disregarding Base Amount Adjustment Items and Debt Discharge Items in computing each Group's taxable income (the "Federal Allocation Method"). For purposes of such allocation, the excess, if any, of (i) Consolidated Tax Liability over (ii) Consolidated Tax Liability determined without regard to any alternative minimum tax liability under Code Section 55, shall be allocated among the Groups in accordance with their respective amounts of alternative minimum taxable income, and any corresponding alternative minimum tax credit shall be allocated in accordance with the allocation of such alternative minimum tax liability. Any amount so allocated to the Industrial Group shall be a liability of Industrial Company to Tenneco under this Section 2, and any amount so allocated to the Shipbuilding Group shall be a liability of Shipbuilding Company to Tenneco under this Section 2. Amounts described in Code Section 1561 (relating to limitations on certain multiple benefits) shall be divided equally among the Tenneco Group, the Industrial Group, and the Shipbuilding Group to the extent permitted by the Code.

(b) *Allocation of Tenneco Federal Consolidated Return Tax Adjustments.* If there is any adjustment to the reported Tax liability with respect to any Tenneco Federal Consolidated Return, or to such Tax liability as previously adjusted, Industrial Company shall be liable to Tenneco for the excess (if any) of—

(i) the Consolidated Tax Liability of the Industrial Group computed as if all members of the Industrial Group included in the Tax Return had filed a consolidated Tax Return for such members based on the Tax Items of such members as so adjusted (the "Industrial Group Recomputed Federal Tax Liability"); over

(ii) the Consolidated Tax Liability of the Industrial Group computed as if such members of the Industrial Group had filed a consolidated Tax Return for such members based on the Tax Items of such

members as reported (or, if applicable, as previously adjusted) (the "Industrial Group Prior Federal Tax Liability").

If the Industrial Group Prior Federal Tax Liability exceeds the Industrial Group Recomputed Federal Tax Liability, Tenneco shall be liable to Industrial Company for such excess. The Shipbuilding Group liability shall be recomputed in a like manner, and Shipbuilding Company shall be liable to Tenneco for any excess of the Shipbuilding Group Recomputed Federal Tax Liability over the Shipbuilding Group Prior Federal Tax Liability, and Tenneco shall be liable to Shipbuilding Company for any excess of the Shipbuilding Group Prior Federal Tax Liability over the Shipbuilding Group Recomputed Federal Tax Liability. For purposes of this Section 2.02(b), if the Industrial Group or the Shipbuilding Group has a net operating loss after taking into account the adjustments allocable to such group, the Recomputed Federal Tax Liability of the group shall be less than zero to the extent such net operating loss produces a Tax Benefit in consolidation for the applicable taxable year.

(c) *Special Allocation With Respect to Energy Investments Group.* If the net operating loss of the Energy Investments Group as reported on the Tenneco Federal Consolidated Tax Return for the taxable year ended December 31, 1996 (but computed as if the Distribution Date were the last day of the Tax Period) is less than \$185,000,000, Industrial Company shall be liable to Tenneco for an amount equal to 35% of the difference between \$185,000,000 and the Energy Investments Group net operating loss or net taxable income. If such net operating loss of the Energy Investments Group is greater than \$213,000,000, Tenneco shall be liable to Industrial Company for an amount equal to 35% of the difference between \$213,000,000 and the amount of the Energy Investments Group net operating loss. If there is any subsequent adjustment to the Energy Investment Group's net operating loss or taxable income, the amount payable by or to Industrial Company under this Section 2.02(c) shall be adjusted accordingly based on the net operating loss or taxable income as adjusted.

2.03 Allocation of State Income Taxes. Except as provided in Sections 2.04, 2.05, 2.06, 6.02, and 6.03, State Income Taxes shall be allocated as follows:

(a) *Separate Company Taxes.* In the case of any State Income Tax which is a Separate Company Tax, Industrial Company shall be liable for such Tax imposed on any members of the Industrial Group, and Shipbuilding Company shall be liable for such Tax imposed on any members of the Shipbuilding Group.

(b) *Consolidated or Combined State Income Taxes.* In the case of any Consolidated or Combined State Income Tax, the liability of Industrial Company and Shipbuilding Company with respect to such Tax for any Tax Period shall be computed as follows:

(i) *Allocation of Tax Reported on Tax Returns Filed After the Distribution Date.* In the case of any Consolidated or Combined State Income Tax reported on any Tax Return filed after the Distribution Date (excluding any amended return), Industrial Company shall be liable to Tenneco for the State Income Tax liability computed as if all members of the Industrial Group included in the computation of such Tax had filed a consolidated or combined Tax Return for such Industrial Group members based on the income, apportionment factors, and other items of such members, and Shipbuilding Company shall be liable to Tenneco for the State Income Tax liability computed as if all members of the Shipbuilding Group included in the computation of such Tax had filed a consolidated or combined Tax Return for such Shipbuilding Group members based on the income, apportionment factors, and other items of such members.

(ii) *Allocation of Combined or Consolidated State Income Tax Adjustments.* If there is any adjustment to the amount of Consolidated or Combined State Income Tax reported on any Tax Return (or as previously adjusted), the liability of the Industrial Group and the Shipbuilding Group shall be recomputed as provided in this subparagraph. Industrial Company shall be liable to Tenneco for the excess (if any) of—

(A) the State Income Tax liability computed as if all members of the Industrial Group included in the Tax Return had filed a consolidated or combined Tax Return for such members

based on the income, apportionment factors, and other items of such members as so adjusted (the "Industrial Group Recomputed State Tax Liability"); over

(B) the State Income Tax liability computed as if such members of the Industrial Group had filed a consolidated or combined Tax Return for such members based on the income, apportionment factors, and other items of such members as reported (or, if applicable, as previously adjusted) (the "Industrial Group Prior State Tax Liability").

If the Industrial Group Prior State Tax Liability exceeds the Industrial Group Recomputed State Tax Liability, Tenneco shall be liable to Industrial Company for such excess. The Shipbuilding Group liability shall be recomputed in a like manner, and Shipbuilding Company shall be liable to Tenneco for any excess of the Shipbuilding Group Recomputed State Tax Liability over the Shipbuilding Group Prior State Tax Liability, and Tenneco shall be liable to Shipbuilding Company for any excess of the Shipbuilding Group Prior State Tax Liability over the Shipbuilding Group Recomputed State Tax Liability. For purposes of this paragraph, the determination and payment of estimated Taxes (including the determination and payment of any Tax required to be paid with a request for an extension of time to file a Tax Return) shall not be treated as an adjustment to the related Consolidated or Combined State Income Tax.

2.04 Allocation of State Income Tax Effects of Federal Audit Adjustments. Tenneco shall be liable for any State Income Taxes resulting from the adjustments to Tenneco Federal Consolidated Returns for Tax Periods ending on or before December 31, 1989. In accordance with Section 6, any Tax Benefit realized by the Shipbuilding Group or by the Industrial Group as a result of Tenneco's payment of such State Income Taxes shall be for the account of Tenneco and shall be paid to Tenneco under Section 6. For example, if Tenneco pays a State Income Tax liability of \$100x related to adjustments to the Tax Return of a member of the Shipbuilding Group, and if such payment is available as a deduction on the Shipbuilding Group's Tax Return for Federal Income Tax, Shipbuilding Company shall pay to Tenneco the Federal Income Tax benefit attributable to the deduction (i.e., \$35x assuming a 35% maximum marginal tax rate under Code Section 11, and assuming the payment is treated as a nondeductible dividend under the Code in accordance with Section 14 of this Agreement).

2.05 Allocation of Other Taxes. Except as provided in Section 2.06, all Taxes other than those specifically allocated pursuant to Sections 2.03 through 2.04 shall be allocated based on the legal entity on which the legal incidence of the Tax is imposed. As between the parties to this Agreement, Industrial Company shall be liable for all Taxes imposed on any member of the Industrial Group (including Taxes imposed on the separate consolidated federal income tax return of Tenneco International Holding Corp.), and Shipbuilding Company shall be liable for all Taxes imposed on any member of the Shipbuilding Group. The Companies believe that there is no Tax not specifically allocated pursuant to Sections 2.03 through 2.04 which is legally imposed on more than one legal entity (e.g., joint and several liability); however, if there is any such Tax, it shall be allocated in accordance with past practices as reasonably determined by the affected Companies, or in the absence of such practices, in accordance with any allocation method agreed upon by the affected Companies.

2.06 Transaction and Other Taxes

(a) **Tenneco Liability.** Except as otherwise provided in Sections 2.06 and 6.02, Tenneco shall be liable for, and shall indemnify and hold harmless Industrial Group and the Shipbuilding Group from and against any liability for, all Taxes resulting from the Transactions (other than Taxes allocated to the Acquiror under the Merger Agreement), including:

(i) Any sales and use, gross receipts, or other transfer Taxes imposed on the transfers occurring pursuant to the Transactions;

(ii) any Tax resulting from any income or gain recognized under Treasury Regulation Sections 1.1502-13 or 1.1502-19 (or any corresponding provisions of other applicable Tax Laws) as a result of the Transactions; and

(iii) any Tax resulting from any income or gain recognized as a result of any of the transactions contemplated by the Distribution Agreement failing to qualify for tax-free treatment under Code Sections 332, 351, 355, 361, or other provisions of the Code (as contemplated in the Ruling Request) or other applicable Tax Laws, or as a result of the Merger failing to qualify for tax-free treatment under Code Sections 354 and 361 or other provisions of the Code or other applicable Tax Laws (as contemplated in the Merger Agreement).

If any Tax referred to in this Section 2.06(a) is included in the definition of Actual Energy Debt Amount, but cannot be calculated on the Energy Determination Date (as such terms are defined in the Debt and Cash Allocation Agreement attached as Exhibit C to the Distribution Agreement), then Industrial Company shall pay to Tenneco the amount which would have been included in the Actual Energy Debt Amount. Such payments shall be made at the time such amounts are determinable. For the purposes of this Section 2.06(a) and the definition of Actual Energy Debt Amount (as defined in the Debt and Cash Allocation Agreement), the term "transfer Taxes" includes any Illinois franchise tax imposed under Ill. Rev. Stat. ch. 805, § 15.65(b) in connection with the transfer by Tenneco Corporation of net intercompany receivables in the approximate amount of \$6.9 billion to a subsidiary of Midwestern Gas Transmission Company in connection with the Corporate Restructuring Transactions.

(b) *Indemnity for Inconsistent Acts.* Industrial Company shall be liable for, and shall indemnify and hold harmless the Tenneco Group and the Shipbuilding Group from and against any liability for, any Restructuring Tax (described in subparagraphs (ii) and (iii) above) to the extent arising from any breach of Industrial Company's representations or covenants under Section 11. Shipbuilding Company shall be liable for, and shall indemnify and hold harmless the Tenneco Group and the Industrial Group from and against any liability for, any Restructuring Tax to the extent arising from any breach of Shipbuilding Company's representations or covenants under Section 11. Acquiror shall be liable for, and shall indemnify and hold harmless the Industrial Group and Shipbuilding Group from and against any liability for, any Restructuring Tax to the extent arising from any breach of Acquiror's representations or covenants under Section 11.

(c) *Indemnity for Representations.* Industrial Company shall be liable for, and shall indemnify and hold harmless the Tenneco Group and the Shipbuilding Group from and against any liability for, any Restructuring Tax to the extent arising from the inaccuracy of any factual statements or representations in connection with the Ruling Request or the Tax Opinion, but in each case only to the extent such inaccuracy arises from facts in existence prior to the Effective Time, and excluding any inaccuracy with respect to any statements or representations relating to Acquiror, Shipbuilding Company, or their Affiliates or any plan or intention on the part of Acquiror, Shipbuilding Company, or their Affiliates as to actions to be taken at or subsequent to the Effective Time. Shipbuilding Company shall be liable for, and shall indemnify and hold harmless the Tenneco Group and the Industrial Group from and against any liability for, any Restructuring Tax to the extent arising from the inaccuracy of any factual statements or representations relating to the Shipbuilding Company or its Affiliates in connection with the Ruling Request or the Tax Opinion. Acquiror shall be liable for, and shall indemnify and hold harmless the Industrial Group and the Shipbuilding Group from and against any liability for, any Restructuring Tax to the extent arising from the inaccuracy of any factual statements or representations relating to Acquiror or its Affiliates (other than the Tenneco Group) in connection with the Ruling Request or the Tax Opinion.

(d) *Change in Law Relating to Deferred Gains.* If between the date of the Merger Agreement and the Effective Time there is a change in law and as a result of such change in law Tenneco is required to restore to income as a result of the Merger the deferred gains identified on Schedule 2 to the Debt and Cash Allocation Agreement attached as Exhibit C to the Distribution Agreement, then any resulting Tax shall be allocated equally between Industrial Company and Tenneco. For purposes of this Section 2.06(d), the term "change in law" shall mean any of the following occurring between the date of the Merger Agreement and the Effective Time: (i) an amendment to the Code; (ii) an amendment to the Treasury Regulations (including any issuance of proposed, temporary, or final Treasury Regulations); (iii) a decision of the Tax Court, any Federal District Court, the Court of Federal Claims, the Federal Circuit Court, or the United States Supreme Court; and (iv) any notice, announcement, or other administrative pronouncement published by the Internal

Revenue Service in the Internal Revenue Bulletin to the effect that the Treasury Department intends to issue Treasury Regulations after the Effective Time that will be effective with respect to the Transactions.

(e) *Taxes Relating to Settlement Receipts For Account of Industrial Company.* To the extent the economic benefit of any amounts received by the Energy Business prior to the Effective Time from the settlement of pending litigation (as identified on Schedule G2 to Exhibit G of the Merger Agreement) is allocated to Industrial Company under the Debt and Cash Allocation Agreement, any corresponding tax liability with respect to such amounts shall be allocated to Industrial Company.

SECTION 3. *Proration of Taxes for Straddle Periods*

3.01 *General Method of Proration.* In the case of any Straddle Period, Tax Items shall be apportioned between Pre-Distribution Periods and Post-Distribution Periods in accordance with the principles of Treasury Regulation Section 1.1502-76(b) as reasonably interpreted and applied by the Companies. No election shall be made under Treasury Regulation Section 1.1502-76(b)(2)(ii) (relating to ratable allocation of a year's items). If the Distribution Date is not an Accounting Cutoff Date, the provisions of Treasury Regulation Section 1.1502-76(b)(2)(iii) will be applied to ratably allocate the items (other than extraordinary items) for the month which includes the Distribution Date.

3.02 *Transaction Treated as Extraordinary Item.* In determining the apportionment of Tax Items between Pre-Distribution Periods and Post-Distribution Periods, any Tax Items relating to the Transactions shall be treated as an extraordinary item described in Treasury Regulation Section 1.1502-76(b)(2)(ii)(C) and shall be allocated to Pre-Distribution Periods, and any Taxes related to such items shall be treated under Treasury Regulation Section 1.1502-76(b)(2)(iv) as relating to such extraordinary item and shall be allocated to Pre-Distribution Periods.

SECTION 4. *Preparation and Filing of Tax Returns*

4.01 *General.* Except as otherwise provided in this Section 4, Tax Returns shall be prepared and filed when due (including extensions) by the person obligated to file such Tax Returns under the Code or applicable Tax Law. The Companies shall provide, and shall cause their Affiliates to provide, assistance and cooperate with one another in accordance with Section 7 with respect to the preparation and filing of Tax Returns, including providing information required to be provided in Section 7. As used in this Section 4, the terms "domestic" and "foreign" have the meanings ascribed to such terms in Code Section 7701.

4.02 *Industrial Company's Responsibility.* Industrial Company has the exclusive obligation and right to prepare and file, or to cause to be prepared and filed:

(a) Tenneco Federal Consolidated Returns for Tax Periods ending on or before December 31, 1996.

(b) Tax Returns for State Income Taxes (including Tax Returns with respect to State Income Taxes that are Separate Company Taxes) which the Companies reasonably determine, in accordance with Tenneco's past practices, are required to be filed by the Companies or any of their Affiliates for Tax Periods ending on or before December 31, 1996, other than Tax Returns with respect to State Income Taxes that are Separate Company Taxes of the Shipbuilding Group for Tax Periods beginning on or after the Distribution Date. If Acquiror elects or is required to combine the income of any Company or its Affiliates with the income of the Acquiror or any of its Affiliates (other than any Company or its Affiliates) with respect to any Tax Return for State Income Taxes for any Tax Period ending on or before December 31, 1996, Industrial Company shall provide to Acquiror in accordance with a compliance schedule to be agreed to by Industrial Company and Acquiror information and documents reasonably required by Acquiror to prepare and file such Tax Return, and Acquiror shall have the exclusive obligation and right to prepare and file such Tax Return, or to cause such Tax Return to be prepared and filed.

(c) Tax Returns that are required to be filed by the members of the Industrial Group (including the federal consolidated Tax Return required to be filed by Tenneco International Holding Corp.).

Nothing in this Section 4.02 shall impose on Industrial Company any liability for any failure to file any Tax Return, or for failure to file any Tax Return when due, with respect to any Pre-Distribution Period if the due date for such return (including extensions) was prior to the Distribution Date.

4.03 Shipbuilding Company's Responsibility. Shipbuilding Company has the exclusive obligation and right to prepare and file, or to cause to be prepared and filed, Tax Returns required to be filed by members of the Shipbuilding Group other than those Tax Returns which Industrial Company is required to prepare and file under Section 4.02.

4.04 Tenneco Responsibility. Tenneco shall prepare and file, or shall cause to be prepared and filed, Tax Returns required to be filed by or with respect to members of the Tenneco Group other than those Tax Returns which Industrial Company is required to prepare and file under Section 4.02. The Tax Returns required to be prepared and filed by Tenneco under this Section 4.04 shall include (a) the Tenneco Federal Consolidated Return for Tax Periods ending after December 31, 1996, (b) Tax Returns for Consolidated or Combined State Income Taxes which the Companies reasonably determine, in accordance with Tenneco's past practices, are required to be filed by the Companies or any of their Affiliates for Tax Periods ending after December 31, 1996, and (c) Tax Returns for State Income Taxes for Tax Periods ending on or before December 31, 1996 if Acquiror elects or is required to combine the income of any Company or its Affiliates with the income of the Acquiror or any of its Affiliates (other than any Company or its Affiliates) with respect to such Tax Return.

4.05 Tax Accounting Practices

(a) **General Rule.** Except as otherwise provided in this Section 4.05, any Tax Return for any Pre-Distribution Period or any Straddle Period, and any Tax Return for any Post-Distribution Period to the extent items reported on such Tax Return might reasonably affect items reported on any Tax Return for any Pre-Distribution Period or any Straddle Period, shall be prepared in accordance with past Tax accounting practices used with respect to the Tax Returns in question (unless such past practices are no longer permissible under the Code or other applicable Tax Law), and to the extent any items are not covered by past practices (or in the event such past practices are no longer permissible under the Code or other applicable Tax Law), in accordance with reasonable Tax accounting practices selected by the Responsible Company. The Companies agree to report their portion of the consolidated cumulative overall foreign loss based on the notional account balances determined on a legal entity basis in a manner consistent with past practices.

(b) **Reporting of Transaction Tax Items Other Than Debt Discharge Items and Base Amount Adjustment Items.** The tax treatment reported on any Tax Return of Tax Items relating to the Transactions shall be consistent with the treatment of such item in the IRS Ruling Letter (as defined in the Merger Agreement) and the Tax Opinion (unless such treatment is not permissible under the Code). To the extent there is a Tax Item relating to the Transactions which is not covered by the IRS Ruling Letter or the Tax Opinion, the Companies shall agree on the tax treatment of any such Tax Item reported on any Tax Return. For this purpose, the tax treatment of such Tax Items on a Tax Return by the Responsible Company with respect to such Tax Return shall be agreed to by the other Company unless either (i) there is no reasonable basis for such tax treatment, or (ii) such tax treatment is inconsistent with the tax treatment contemplated in the Ruling Request or in the Tax Opinion. Such Tax Return shall be submitted for review pursuant to Section 4.07(a), and any dispute regarding such proper tax treatment shall be referred for resolution pursuant to Section 15, sufficiently in advance of the filing date of such Tax Return (including extensions) to permit timely filing of the return.

(c) **Debt Discharge Items.** Industrial Company shall determine the tax treatment of any Debt Discharge Item on any Tax Return, subject only to the other Companies' rights of review under Section 4.07.

(d) **Base Amount Adjustment Items.** Tenneco shall determine the tax treatment of any Base Amount Adjustment Item on any Tax Return, subject only to the other Companies' rights of review under Section 4.07.

4.06 Consolidated or Combined Returns. The Companies will elect and join, and will cause their respective Affiliates to elect and join, in filing consolidated, unitary, combined, or other similar joint Tax Returns, to the extent each entity is eligible to join in such Tax Returns, if the Companies reasonably determine that the filing of such Tax Returns is consistent with past reporting practices, or in the absence of applicable past practices, will result in the minimization of the net present value of the aggregate Tax to the entities eligible to join in such Tax Returns.

4.07 Right to Review Tax Returns

(a) *General.* The Responsible Company with respect to any Tax Return shall make such Tax Return and related workpapers available for review by the other Companies, if requested, to the extent (i) such Tax Return relates to Taxes for which the requesting party may be liable, (ii) such Tax Return relates to Taxes for which the requesting party may be liable in whole or in part for any additional Taxes owing as a result of adjustments to the amount of Taxes reported on such Tax Return, (iii) such Tax Return relates to Taxes for which the requesting party may have a claim for Tax Benefits under this Agreement, or (iv) the requesting party reasonably determines that it must inspect such Tax Return to confirm compliance with the terms of this Agreement. The Responsible Company shall use its reasonable best efforts to make such Tax Return available for review as required under this paragraph sufficiently in advance of the due date for filing such Tax Returns to provide the requesting party with a meaningful opportunity to analyze and comment on such Tax Returns and have such Tax Returns modified before filing, taking into account the person responsible for payment of the tax (if any) reported on such Tax Return and the materiality of the amount of Tax liability with respect to such Tax Return. The Companies shall attempt in good faith to resolve any issues arising out of the review of such Tax Returns.

(b) *Execution of Returns Prepared by Other Party.* In the case of any Tax Return which is required to be prepared and filed by one Company under this Agreement and which is required by law to be signed by another Company (or by its authorized representative), the Company which is legally required to sign such Tax Return shall not be required to sign such Tax Return under this Agreement if there is no reasonable basis for the tax treatment of any material items reported on the Tax Return.

4.08 Claims for Refund, Carrybacks, and Self-Audit Adjustments ("Adjustment Requests")

(a) *Consent Required for Adjustment Requests Related to Consolidated or Combined Income Taxes.* Except as provided in paragraphs (b), (c), and (d) below, each of the Companies hereby agrees that, unless each of the other Companies consents in writing, which consent shall not be unreasonably withheld, (i) no Adjustment Request with respect to any Consolidated or Combined Income Tax for a Pre-Distribution Period shall be filed, and (ii) any available elections to waive the right to claim in any Pre-Distribution Period with respect to any Consolidated or Combined Income Tax any Carryback arising in a Post-Distribution Period shall be made, and no affirmative election shall be made to claim any such Carryback. Any Adjustment Request which the Companies consent to make under this Section 4.08 shall be prepared and filed by the Responsible Company under Section 4.02 for the Tax Return to be adjusted. The Company requesting the Adjustment Request shall provide to the Responsible Company all information required for the preparation and filing of such Adjustment Request in such form and detail as reasonably requested by the Responsible Company.

(b) *Exception for Adjustment Requests Related to Debt Discharge Items.* Industrial Company shall have the right, without the consent of any other party, to file (i) IRS Form 4466 (Corporation Application for Quick Refund of Overpayment of Estimated Tax) (or any similar Adjustment Request allowed under the Code or other Tax Laws) to claim the benefit of any reduction of required estimated Federal Income Tax as a result of Debt Discharge Items, or (ii) IRS Form 1139 (Corporation Application for Tentative Refund) or IRS Form 1120X (Corporation Amended Return) (or any similar Adjustment Request allowed under the Code or other Tax Laws), and to make any elections necessary to file such forms, with respect to any net operating loss Carryback arising in any Tax Period in which there is any reduction of Taxes as a result of Debt Discharge Items if any portion of such Carryback is attributable to such Debt Discharge Items (determined in accordance with the principles of Section 6.04). If Industrial Company is not the Responsible

Company with respect to any such return, then the Responsible Company shall file such return upon request of the Industrial Company.

(c) *Exception for Adjustment Requests Related to Base Amount Adjustment Items.* Tenneco shall have the right, without the consent of any other party, to file (i) IRS Form 4466 (Corporation Application for Quick Refund of Overpayment of Estimated Tax) (or any similar Adjustment Request allowed under the Code or other Tax Laws) to claim the benefit of any reduction of required estimated Federal Income Tax as a result of Base Amount Adjustment Items, or (ii) IRS Form 1139 (Corporation Application for Tentative Refund) or IRS Form 1120X (Corporation Amended Return) (or any similar Adjustment Request allowed under the Code or other Tax Laws), and to make any elections necessary to file such forms, with respect to any net operating loss Carryback arising in Tax Period in which there is any reduction of Taxes as a result of Base Amount Adjustment Items if any portion of such Carryback is attributable to Base Amount Adjustment Items (determined in accordance with the principles of Section 6.04). If Tenneco is not the Responsible Company with respect to any such return, then the Responsible Company shall file such return upon request of the Industrial Company.

(d) *Exception for Adjustment Requests Related to Audit Adjustments.* Each of the Companies shall be entitled, without the consent of any other Company, to require Industrial Company to file an Adjustment Request to take into account any net operating loss, net capital loss, deduction, credit, or other adjustment attributable to such Company or any member of its Group corresponding to any adjustment resulting from any audit by the Internal Revenue Service or other Tax Authority with respect to Consolidated or Combined Income Taxes for any Pre-Distribution Tax Period. For example, if the Internal Revenue Service requires a Company to capitalize an item deducted for the taxable year 1993, the Company shall be entitled, without the consent of any other Company, to require Industrial Company to file an Adjustment Request for the taxable year 1994 (and later years) to take into account any depreciation or amortization deductions in such years directly related to the item capitalized in 1993.

(e) *Other Adjustment Requests Permitted.* Nothing in this Section 4.08 shall prevent any Company or its Affiliates from filing any Adjustment Request with respect to Income Taxes which are not Consolidated or Combined Income Taxes or with respect to any Taxes other than Income Taxes. Any refund or credit obtained as a result of any such Adjustment Request (or otherwise) shall be for the account of the person liable for the Tax under this Agreement.

(f) *Payment of Refunds.* Any refunds or other Tax Benefits received by any Company (or any of its Affiliates) as a result of any Adjustment Request which are for the account of another Company (or member of such other Company's Group) shall be paid by the Company receiving (or whose Affiliate received) such refund or Tax Benefit to such other Company in accordance with Section 6.

SECTION 5. Tax Payments and Intercompany Billings

5.01 Payment of Taxes With Respect to Tenneco Federal Consolidated Returns Filed After the Distribution Date. In the case of any Tenneco Federal Consolidated Return the due date for which (including extensions) is after the Distribution Date,

(a) *Computation and Payment of Tax Due.* At least three business days prior to any Payment Date, the Responsible Company shall compute the amount of Tax required to be paid to the Internal Revenue Service (taking into account the requirements of Section 4.05 relating to consistent accounting practices) with respect to such Tax Return on such Payment Date and, if Tenneco is not the Responsible Company with respect to such Tax Return, shall notify Tenneco in writing of the amount of Tax required to be paid on such Payment Date. Tenneco will pay such amount to the Internal Revenue Service on or before such Payment Date.

(b) *Computation and Payment of Industrial Company Liability With Respect to Tax Due.* Within 30 days following any Payment Date, Industrial Company will pay to Tenneco the excess (if any) of—

(i) the Consolidated Tax Liability determined as of such Payment Date with respect to the applicable Tax Period allocable to the members of the Industrial Group as determined by the

Responsible Company in a manner consistent with the provisions of Section 2.02(a) (relating to allocation of the Consolidated Tax Liability in accordance with the Federal Allocation Method) (the "Allocated Federal Tax Liability"), over

(ii) the cumulative net payments with respect to such Tax Return prior to such Payment Date by the members of the Industrial Group (the "Cumulative Federal Tax Payment").

If the Industrial Group Cumulative Federal Tax Payment is greater than the Industrial Group Allocated Federal Tax Liability as of any Payment Date, then Tenneco shall pay such excess to Industrial Company within 30 days of Tenneco's receipt of the corresponding Tax Benefit (i.e., through either a reduction in Tenneco's otherwise required Tax payment, or a refund of prior tax payments). Any amount due under Section 2.02(c) with respect to the Energy Investments Group net operating loss or taxable income as reported on the Tenneco Federal Consolidated Tax Return for the taxable year ended December 31, 1996 shall be paid within 30 days following the Payment Date which is the date the return is filed, and any subsequent adjustment to the payment due under Section 2.02(c) shall be paid with interest as determined in a manner consistent with the provisions of Section 5.02.

(c) *Computation and Payment of Shipbuilding Company Liability With Respect to Tax Due.* Within the time for any payment under paragraph (b) of this subsection, the Responsible Company shall also notify Tenneco, if necessary, and Shipbuilding Company in writing of the Shipbuilding Group Allocated Federal Tax Liability and the Shipbuilding Group Cumulative Federal Tax Payment (computed in manner consistent with paragraph (b) of this subsection). If the Shipbuilding Group Allocated Federal Tax Liability exceeds the Shipbuilding Group Cumulative Federal Tax Payment, then Shipbuilding Company shall pay such excess to Tenneco within three business days following receipt of such notice. If the Shipbuilding Group Cumulative Federal Tax Payment exceeds the Shipbuilding Group Allocated Federal Tax Liability, then Tenneco shall pay such excess to Shipbuilding Company within 30 days of Tenneco's receipt of the corresponding Tax Benefit (i.e., either a reduction in Tenneco's otherwise required Tax payment, or a refund of estimated tax payments).

(d) *Deemed Cumulative Federal Tax Payment for First Payment Date After the Distribution Date.* For purposes of Sections 5.01(b)(ii) and 5.01(c) with respect to the Tenneco Federal Consolidated Tax Return for the taxable year ended December 31, 1996, the Industrial Group's Cumulative Federal Tax Payment shall be equal to \$49,000,000, and the Shipbuilding Group's Cumulative Federal Tax Payment shall be equal to \$40,000,000.

(e) *Interest on Intergroup Tax Allocation Payments.* In the case of any payments to Tenneco required under paragraphs (b) or (c) of this subsection 5.01, the payor shall also pay to Tenneco an amount of interest computed at the Prime Rate on the amount of the payment required based on the number of days from the applicable Payment Date to the date of payment. In the case of any payments by Tenneco required under paragraphs (b) or (c) of this subsection 5.01, Tenneco shall also pay to the payee an amount of interest computed at the Prime Rate on the amount of the payment required based on the number of days from the date of receipt of the Tax Benefit to the date of payment of such amount to the payee.

(f) *Representation Regarding Cumulative 1996 Federal Income Tax Payments.* Industrial Company represents and warrants to Tenneco that, as of the the date hereof, \$205,500,000 of cumulative net payments have been made by Tenneco, and credited by the Internal Revenue Service, with respect to the 1996 Tenneco Federal Consolidated Return.

5.02 Payment of Federal Income Tax Related to Adjustments

(a) *Adjustments Resulting in Underpayments.* Tenneco shall pay to the Internal Revenue Service when due any additional Federal Income Tax required to be paid as a result of any adjustment to the Tax liability with respect to any Tenneco Federal Consolidated Return for any Pre-Distribution Period. The Responsible Company shall compute the amount attributable to Industrial Group and the Shipbuilding Group in accordance with Section 2.02(b) and Industrial Company and Shipbuilding Company shall pay to Tenneco any amount due Tenneco under Section 2.02(b) within 30 days from the later of (i) the date the additional Tax was paid by Tenneco or (ii) the date of receipt by Industrial Company or Shipbuilding Company (as applicable) of a written notice and demand from Tenneco for payment of the amount due, accompanied by evidence of payment and a statement detailing the Taxes paid and describing in reasonable detail the

particulars relating thereto. Any amount due to Industrial Company or Shipbuilding Company under Section 2.02(b) shall be paid within 30 days from the date the additional Tax was paid by Tenneco to the Internal Revenue Service. Any payments required under this Section 5.02(a) shall include interest computed at the Prime Rate based on the number of days from the date the additional Tax was paid by Tenneco to the date of the payment under this Section 5.02(a).

(b) *Adjustments Resulting in Overpayments.* Within 30 days of receipt by Tenneco of any Tax Benefit resulting from any adjustment to the Consolidated Tax Liability with respect to any Tenneco Federal Consolidated Return for any Pre-Distribution Period, Tenneco shall pay to Industrial Company and Shipbuilding Company, or Industrial Company and Shipbuilding Company shall pay to Tenneco (as the case may be), their respective amounts due from or to Tenneco as determined by the Responsible Company in accordance with Section 2.02(b). Any payments required under this Section 5.02(a) shall include interest computed at the Prime Rate based on the number of days from the date the Tax Benefit was received by Tenneco to the date of payment to Industrial Company or Shipbuilding Company under this Section 5.02(b).

5.03 Payment of State Income Tax With Respect to Returns Filed After the Distribution Date

(a) *Computation and Payment of Tax Due.* At least three business days prior to any Payment Date for any Tax Return with respect to any State Income Tax, the Responsible Company shall compute the amount of Tax required to be paid to the applicable Tax Authority (taking into account the requirements of Section 4.05 relating to consistent accounting practices) with respect to such Tax Return on such Payment Date and—

(i) If such Tax Return is with respect to a Consolidated or Combined State Income Tax, the Responsible Company shall, if Tenneco is not the Responsible Company with respect to such Tax Return, notify Tenneco in writing of the amount of Tax required to be paid on such Payment Date. Tenneco will pay such amount to such Tax Authority on or before such Payment Date.

(ii) If such Tax Return is with respect to a Separate Company Tax, the Responsible Company shall, if it is not the Company liable for the Tax reported on such Tax Return, notify the Company liable for such Tax in writing of the amount of Tax required to be paid on such Payment Date. The Company liable for such Tax will pay such amount to such Tax Authority on or before such Payment Date.

(b) *Computation and Payment of Industrial Company Liability and Shipbuilding Company Liability With Respect to Tax Due.* Within 120 days following the due date (including extensions) for filing any Tax Return for any Consolidated or Combined State Income Tax (excluding any Tax Return with respect to payment of estimated Taxes or Taxes due with a request for extension of time to file), (i) Industrial Company shall pay to Tenneco the tax liability allocable to the Industrial Group as determined by the Responsible Company under the provisions of Section 2.03(b)(i), plus interest computed at the Prime Rate on the amount of the payment based on the number of days from the due date (including extensions) to the date of payment by Industrial Company to Tenneco, and (ii) the Responsible Company shall notify Tenneco (if Tenneco is not the Responsible Company with respect to such Tax Return) and Shipbuilding Company in writing of the tax liability allocable to the Shipbuilding Group as determined by the Responsible Company under the provisions of Section 2.03(b)(i). Within three business days following receipt of such notice, Shipbuilding Company shall pay to Tenneco the Shipbuilding Group's allocated tax liability as set forth in such notice, plus interest computed at the Prime Rate on the amount of the payment based on the number of days from the due date (including extensions) to the date of payment by Shipbuilding Company to Tenneco.

5.04 Payment of State Income Taxes Related to Adjustments

(a) *Adjustments Resulting in Underpayments.* Tenneco shall pay to the applicable Tax Authority when due any additional State Income Tax required to be paid as a result of any adjustment to the tax liability with respect to any Tax Return for any Consolidated or Combined State Income Tax for any Pre-Distribution Period. Industrial Company and Shipbuilding Company shall pay to Tenneco their respective shares of any such additional Tax payment determined by the Responsible Company in accordance with Section 2.03(b)(ii) within 120 days from the later of (i) the date the additional Tax was paid by Tenneco or

(ii) the date of receipt by Industrial Company or Shipbuilding Company (as applicable) of a written notice and demand from Tenneco for payment of the amount due, accompanied by evidence of payment and a statement detailing the Taxes paid and describing in reasonable detail the particulars relating thereto. Industrial Company and Shipbuilding Company shall also pay to Tenneco interest on their respective shares of such Tax computed at the Prime Rate based on the number of days from the date the additional Tax was paid by Tenneco to the date of their payment to Tenneco under this Section 5.04(a).

(b) *Adjustments Resulting in Overpayments.* Within 120 days of receipt by Tenneco of any Tax Benefit resulting from any adjustment to the tax liability with respect to any Tax Return for any Consolidated or Combined State Income Tax for any Pre-Distribution Period, Tenneco shall pay to Industrial Company and Shipbuilding Company their respective shares of any such Tax Benefit determined by the Responsible Company in accordance with Section 2.03(b)(ii). Tenneco shall also pay to Industrial Company or Shipbuilding Company interest on their respective shares of such Tax Benefit computed at the Prime Rate based on the number of days from the date the Tax Benefit was received by Tenneco to the date of payment to Industrial Company or Shipbuilding Company under this Section 5.04(b).

5.05 Payment of Separate Company Taxes. Each Company shall pay, or shall cause to be paid, to the applicable Tax Authority when due all Separate Company Taxes owed by such Company or a member of such Company's Group.

5.06 Indemnification Payments. If any Company (the "payor") is required to pay to a Tax Authority a Tax that another Company (the "responsible party") is required to pay to such Taxing Authority under this Agreement, the responsible party shall reimburse the payor within 30 days of delivery by the payor to the responsible party of an invoice for the amount due, accompanied by evidence of payment and a statement detailing the Taxes paid and describing in reasonable detail the particulars relating thereto. The reimbursement shall include interest on the Tax payment computed at the Prime Rate based on the number of days from the date of the payment to the Tax Authority to the date of reimbursement under this Section 5.06.

SECTION 6. Tax Benefits

6.01 General Rule. If a member of one Group receives any Tax Benefit with respect to any Taxes for which a member of another Group is liable hereunder, the Company receiving such Tax Benefit shall make a payment to the Company who is liable for such Taxes hereunder within 30 days following receipt of the Tax Benefit in an amount equal to the Tax Benefit (including any Tax Benefit realized as a result of the payment), plus interest on such amount computed at the Prime Rate based on the number of days from the date of receipt of the Tax Benefit to the date of payment of such amount under this Section 6.01.

6.02 Debt Discharge Items

(a) Any Tax Benefit attributable to Debt Discharge Items (determined in accordance with the principles of Section 6.04) shall be credited against any amount owed by Industrial Company to Tenneco under Sections 5.01(b) or 5.03(b), and any excess Tax Benefit shall be paid by Tenneco to Industrial Company as an amount owed by Tenneco to Industrial Company under Sections 5.01(b) or 5.03(b). If the Tax Benefit is subsequently adjusted (including any adjustment to the Tax Benefit received as a reduction in otherwise required estimated tax payments), Industrial Company shall pay to Tenneco an amount equal to any reduction in the Tax Benefit, and Tenneco shall pay to Industrial Company an amount equal to any increase in the Tax Benefit, in each case under Section 5.01(b) (in the case of adjustments to Tax payments), or Sections 5.02 or 5.04 (in the case of audit adjustments).

(b) Any Tax liability attributable to Debt Discharge Items (determined in accordance with the principles of Section 6.04) shall be paid by Industrial Company to Tenneco as an additional amount owed by Industrial Company to Tenneco under Section 5.01(b) or 5.03(b). Any adjustment to such Tax liability shall be paid under Section 5.01(b) (in the case of adjustments to Tax payments), or Sections 5.02 or 5.04 (in the case of audit adjustments).

(c) Payments under this Section 6.02 shall include interest as provided under Sections 5.01, 5.02, 5.03, or 5.04, as applicable.

6.03 Base Amount Adjustment Items. Any Tax Benefit (or Tax liability) attributable to Base Amount Adjustment Items (determined in accordance with the principles of Section 6.04) shall be for the account of Tenneco, regardless of the legal entity reporting such Tax Benefit or Tax liability. Pursuant to this Section 6.03, to the extent any net operating loss of the Tenneco Group is attributable to Base Amount Adjustment Items (determined in accordance with the principles of Section 6.04), any Tax Benefit associated with the deduction of such net operating loss (either in the current year or as a carryback or carryover) shall be for the account of Tenneco.

6.04 Ordering of Tax Items. Tax Items for any Tax Period shall be taken into account for purposes of this Agreement in the following order of priority:

- (a) First, Tax Items other than Debt Discharge Items and Base Amount Adjustment Items.
- (b) Second, Debt Discharge Items and Base Amount Adjustment Items (other than GSR Items) in proportion to the relative net amounts of such items.
- (c) Third, GSR Items.

SECTION 7. Assistance and Cooperation

7.01 General. After the Distribution Date, each of the Companies shall cooperate (and cause their respective Affiliates to cooperate) with each other and with each other's agents, including accounting firms and legal counsel, in connection with Tax matters relating to the Companies and their Affiliates including (i) preparation and filing of Tax Returns, (ii) determining the liability for and amount of any Taxes due (including estimated Taxes) or the right to and amount of any refund of Taxes, (iii) examinations of Tax Returns, and (iv) any administrative or judicial proceeding in respect of Taxes assessed or proposed to be assessed. Such cooperation shall include making all information and documents in their possession relating to the other Companies and their Affiliates available to such other Companies as provided in Section 8. Each of the Companies shall also make available to each other, as reasonably requested and available, personnel (including officers, directors, employees and agents of the Companies or their respective Affiliates) responsible for preparing, maintaining, and interpreting information and documents relevant to Taxes, and personnel reasonably required as witnesses or for purposes of providing information or documents in connection with any administrative or judicial proceedings relating to Taxes. Any information or documents provided under this Section 7 shall be kept confidential by the Company receiving the information or documents, except as may otherwise be necessary in connection with the filing of Tax Returns or in connection with any administrative or judicial proceedings relating to Taxes.

7.02 Income Tax Return Information. Each Company will provide to each other Company information and documents relating to their respective Groups required by the other Companies to prepare Tax Returns. The Responsible Company shall determine a reasonable compliance schedule for such purpose in accordance with Tenneco's past practices. Any additional information or documents the Responsible Company requires to prepare such Tax Returns will be provided in accordance with past practices, if any, or as the Responsible Company reasonably requests and in sufficient time for the Responsible Company to file such Tax Returns timely.

SECTION 8. Tax Records

8.01 Retention of Tax Records. Except as provided in Section 8.02, each Company shall preserve and keep all Tax Records exclusively relating to the assets and activities of their respective Groups for Pre-Distribution Tax Periods, and Tenneco shall preserve and keep all other Tax Records relating to Taxes of the Groups for Pre-Distribution Tax Periods, for so long as the contents thereof may become material in the administration of any matter under the Code or other applicable Tax Law, but in any event until the later of (i) the expiration of any applicable statutes of limitation, and (ii) seven years after the Distribution Date. If, prior to the expiration of the applicable statute of limitation and such seven-year period, a Company reasonably determines that any Tax Records which it is required to preserve and keep under this Section 8 are no longer material in the administration

(c) Payments under this Section 6.02 shall include interest as provided under Sections 5.01, 5.02, 5.03, or 5.04, as applicable.

6.03 Base Amount Adjustment Items. Any Tax Benefit (or Tax liability) attributable to Base Amount Adjustment Items (determined in accordance with the principles of Section 6.04) shall be for the account of Tenneco, regardless of the legal entity reporting such Tax Benefit or Tax liability. Pursuant to this Section 6.03, to the extent any net operating loss of the Tenneco Group is attributable to Base Amount Adjustment Items (determined in accordance with the principles of Section 6.04), any Tax Benefit associated with the deduction of such net operating loss (either in the current year or as a carryback or carryover) shall be for the account of Tenneco.

6.04 Ordering of Tax Items. Tax Items for any Tax Period shall be taken into account for purposes of this Agreement in the following order of priority:

- (a) First, Tax Items other than Debt Discharge Items and Base Amount Adjustment Items.
- (b) Second, Debt Discharge Items and Base Amount Adjustment Items (other than GSR Items) in proportion to the relative net amounts of such items.
- (c) Third, GSR Items.

SECTION 7. Assistance and Cooperation

7.01 General. After the Distribution Date, each of the Companies shall cooperate (and cause their respective Affiliates to cooperate) with each other and with each other's agents, including accounting firms and legal counsel, in connection with Tax matters relating to the Companies and their Affiliates including (i) preparation and filing of Tax Returns, (ii) determining the liability for and amount of any Taxes due (including estimated Taxes) or the right to and amount of any refund of Taxes, (iii) examinations of Tax Returns, and (iv) any administrative or judicial proceeding in respect of Taxes assessed or proposed to be assessed. Such cooperation shall include making all information and documents in their possession relating to the other Companies and their Affiliates available to such other Companies as provided in Section 8. Each of the Companies shall also make available to each other, as reasonably requested and available, personnel (including officers, directors, employees and agents of the Companies or their respective Affiliates) responsible for preparing, maintaining, and interpreting information and documents relevant to Taxes, and personnel reasonably required as witnesses or for purposes of providing information or documents in connection with any administrative or judicial proceedings relating to Taxes. Any information or documents provided under this Section 7 shall be kept confidential by the Company receiving the information or documents, except as may otherwise be necessary in connection with the filing of Tax Returns or in connection with any administrative or judicial proceedings relating to Taxes.

7.02 Income Tax Return Information. Each Company will provide to each other Company information and documents relating to their respective Groups required by the other Companies to prepare Tax Returns. The Responsible Company shall determine a reasonable compliance schedule for such purpose in accordance with Tenneco's past practices. Any additional information or documents the Responsible Company requires to prepare such Tax Returns will be provided in accordance with past practices, if any, or as the Responsible Company reasonably requests and in sufficient time for the Responsible Company to file such Tax Returns timely.

SECTION 8. Tax Records

8.01 Retention of Tax Records. Except as provided in Section 8.02, each Company shall preserve and keep all Tax Records exclusively relating to the assets and activities of their respective Groups for Pre-Distribution Tax Periods, and Tenneco shall preserve and keep all other Tax Records relating to Taxes of the Groups for Pre-Distribution Tax Periods, for so long as the contents thereof may become material in the administration of any matter under the Code or other applicable Tax Law, but in any event until the later of (i) the expiration of any applicable statutes of limitation, and (ii) seven years after the Distribution Date. If, prior to the expiration of the applicable statute of limitation and such seven-year period, a Company reasonably determines that any Tax Records which it is required to preserve and keep under this Section 8 are no longer material in the administration

of any matter under the Code or other applicable Tax Law, such Company may dispose of such records upon 90 days prior notice to the other Companies. Such notice shall include a list of the records to be disposed of describing in reasonable detail each file, book, or other record accumulation being disposed. The notified Companies shall have the opportunity, at their cost and expense, to copy or remove, within such 90-day period, all or any part of such Tax Records.

8.02 State Income Tax Returns. Tax Returns with respect to State Income Taxes and workpapers prepared in connection with preparing such Tax Returns shall be preserved and kept, in accordance with the guidelines of Section 8.01, by the Company responsible for preparing and filing the applicable Tax Return.

8.03 Access to Tax Records. The Companies and their respective Affiliates shall make available to each other for inspection and copying during normal business hours upon reasonable notice all Tax Records in their possession to the extent reasonably required by the other Company in connection with the preparation of Tax Returns, audits, litigation, or the resolution of items under this Agreement.

SECTION 9. Tax Contests

9.01 Notice. Each of the parties shall provide prompt notice to the other parties of any pending or threatened Tax audit, assessment or proceeding or other Tax Contest of which it becomes aware related to Taxes for Tax Periods for which it is indemnified by one or more other parties hereunder. Such notice shall contain factual information (to the extent known) describing any asserted Tax liability in reasonable detail and shall be accompanied by copies of any notice and other documents received from any Tax Authority in respect of any such matters. If an indemnified party has knowledge of an asserted Tax liability with respect to a matter for which it is to be indemnified hereunder and such party fails to give the indemnifying party prompt notice of such asserted Tax liability, then (i) if the indemnifying party is precluded from contesting the asserted Tax liability in any forum as a result of the failure to give prompt notice, the indemnifying party shall have no obligation to indemnify the indemnified party for any Taxes arising out of such asserted Tax liability, and (ii) if the indemnifying party is not precluded from contesting the asserted Tax liability in any forum, but such failure to give prompt notice results in a monetary detriment to the indemnifying party, then any amount which the indemnifying party is otherwise required to pay the indemnified party pursuant to this Agreement shall be reduced by the amount of such detriment.

9.02 Control of Tax Contests

(a) **Separate Company Taxes.** In the case of any Tax Contest with respect to any Separate Company Tax, the Company having liability for the Tax shall have exclusive control over the Tax Contest, including exclusive authority with respect to any settlement of such Tax liability.

(b) **Consolidated or Combined Income Taxes.** In the case of any Tax Contest with respect to any Consolidated or Combined Income Tax, (i) Shipbuilding Company shall control the defense or prosecution of the portion of the Tax Contest directly and exclusively related to any Shipbuilding Adjustment, including settlement of any such Shipbuilding Adjustment, (ii) Tenneco shall control the defense or prosecution of the portion of the Tax Contest directly and exclusively related to any Tenneco Adjustment, including settlement of any such Tenneco Adjustment, and (iii) Industrial Company shall control the defense or prosecution of the portion of the Tax Contest directly and exclusively related to any Industrial Adjustment, including any settlement of any Industrial Adjustment, and (iv) the Tax Contest Committee shall control the defense or prosecution of Joint Adjustments and any and all administrative matters not directly and exclusively related to any Shipbuilding Adjustment, Tenneco Adjustment, or Industrial Adjustment. The Tax Contest Committee shall be comprised of two persons, one person selected by Industrial Company (as designated in writing to Tenneco) and one person selected by Tenneco (as designated in writing to Industrial Company). Each person serving on the Tax Contest Committee shall continue to serve unless and until he or she is replaced by the party designating such person. Any and all matters to be decided by the Tax Contest Committee shall require the unanimous approval of both persons serving on the committee. In the event the Tax Contest Committee shall be deadlocked on any matter, the provisions of Section 15 of this

Agreement shall apply. The Tax Contest Committee shall consult in good faith with Shipbuilding Company to the extent Shipbuilding Company might reasonably be expected to be materially affected by such matters. A Company shall not agree to any Tax liability for which another Company may be liable under this Agreement, or compromise any claim for any Tax Benefit which another Company may be entitled under this Agreement, without such other Company's written consent (which consent may be given or withheld at the sole discretion of the Company from which the consent would be required).

SECTION 10. *Effective Date; Termination of Prior Intercompany Tax Allocation Agreements.* This Agreement shall be effective on the Distribution Date. Immediately prior to the close of business on the Distribution Date (i) all Prior Intercompany Tax Allocation Agreements shall be terminated, and (ii) amounts due under such agreements as of the Distribution Date shall be settled as of the Distribution Date (including capitalization or distribution of amounts due or receivable under such agreements). Upon such termination and settlement, no further payments by or to Tenneco, by or to the Shipbuilding Group, or by or to the Industrial Group, with respect to such agreements shall be made, and all other rights and obligations resulting from such agreements between the Companies and their Affiliates shall cease at such time. Any payments pursuant to such agreements shall be ignored for purposes of computing amounts due under this Agreement.

SECTION 11. *No Inconsistent Actions.* Each of the Companies and the Acquiror covenants and agrees that it will not take any action, and it will cause its Affiliates to refrain from taking any action, which is inconsistent with the Tax treatment of the Transactions as contemplated in the Ruling Request or in the Tax Opinion (any such action is referred to in this Section 11 as a "Prohibited Action"), unless such Prohibited Action is required by law, or the person acting has obtained the prior written consent of each of the other parties (which consent shall not be unreasonably withheld). With respect to any Prohibited Action proposed by a Company or the Acquiror (the "Requesting Party"), each of the other parties (the "Requested Parties") shall grant its consent to such Prohibited Action if the Requesting Party obtains a ruling with respect to the Prohibited Action from the Internal Revenue Service or other applicable Tax Authority that is reasonably satisfactory to each of the Requested Parties (except that the Requesting Party shall not submit any such ruling request if a Requested Party determines in good faith that filing such request might have a materially adverse effect upon such Requested Party). Without limiting the foregoing:

(a) *No Inconsistent Plan or Intent*

(i) Each of Industrial Company and Shipbuilding Company represents and warrants that neither it nor any of its Affiliates has any plan or intent to take any action which is inconsistent with any factual statements or representations in the Ruling Request or in the Tax Opinion. Regardless of any change in circumstances, each of Industrial Company and Shipbuilding Company covenants and agrees that it will not take, and it will cause its Affiliates to refrain from taking, any such inconsistent action on or before the last day of the calendar year ending after the second anniversary of the Distribution Date other than as permitted in this Section 11. For purposes of applying this Section 11(a) to any such inconsistent action prior to the Effective Time, the members of the Tenneco Group shall be treated as Affiliates of Industrial Company.

(ii) Acquiror represents and warrants that neither it nor any of its Affiliates has any plan or intent to take any action which is inconsistent with any factual statements or representations in the Ruling Request or in the Tax Opinion. Regardless of any change in circumstances, Acquiror covenants and agrees that it will not take, and it will cause Tenneco and the other Affiliates of Acquiror to refrain from taking, any such inconsistent action on or before the last day of the calendar year ending after the second anniversary of the Distribution Date other than as permitted in this Section 11.

(b) *Amended or Supplemental Rulings.* Each of the Companies covenants and agrees that it will not file, and it will cause its Affiliates to refrain from filing, any amendment or supplement to the Ruling Request subsequent to the Distribution Date without the consent of the other Companies, which consent shall not be unreasonably withheld.

SECTION 12. *Survival of Obligations.* The representations, warranties, covenants and agreements set forth in this Agreement shall be unconditional and absolute and shall remain in effect without limitation as to time.

SECTION 13. *Employee Matters.* Each of the Companies agrees to utilize, or cause its Affiliates to utilize, the alternative procedure set forth in Revenue Procedure 84-77, 1984-2 C.B. 753, with respect to wage reporting.

SECTION 14. *Treatment of Payments; Tax Gross Up*

14.01 *Treatment of Tax Indemnity and Tax Benefit Payments.* In the absence of any change in tax treatment under the Code or other applicable Tax Law,

(a) any Tax indemnity payments made by a Company under Section 5 shall be reported for Tax purposes by the payor and the recipient as distributions or capital contributions, as appropriate, occurring immediately before the distribution of the Industrial Common Shares and the Shipbuilding Common Shares to Tenneco shareholders on the Distribution Date, but only to the extent the payment does not relate to a Tax allocated to the payor in accordance with Treasury Regulation Section 1.1502-33(d) (or under corresponding principles of other applicable Tax Laws), and

(b) any Tax Benefit payments made by a Company under Section 6, shall be reported for Tax purposes by the payor and the recipient as distributions or capital contributions, as appropriate, occurring immediately before the distribution of Industrial Common Shares and Shipbuilding Common Shares to Tenneco shareholders on the Distribution Date, but only to the extent the payment does not relate to a Tax allocated to the payor in accordance with Treasury Regulation Section 1.1502-33(d) (or under corresponding principles of other applicable Tax Laws).

14.02 *Tax Gross Up.* If notwithstanding the manner in which Tax indemnity payments and Tax Benefit payments were reported, there is an adjustment to the Tax liability of a Company as a result of its receipt of a payment pursuant to this Agreement, such payment shall be appropriately adjusted so that the amount of such payment, reduced by the amount of all Income Taxes payable with respect to the receipt thereof (but taking into account all correlative Tax Benefits resulting from the payment of such Income Taxes), shall equal the amount of the payment which the Company receiving such payment would otherwise be entitled to receive pursuant to this Agreement.

14.03 *Interest Under This Agreement.* Anything herein to the contrary notwithstanding, to the extent one Company ("indemnitor") makes a payment of interest to another Company ("indemnitee") under this Agreement with respect to the period from the date that the indemnitee made a payment of Tax to a Tax Authority to the date that the indemnitor reimbursed the indemnitee for such Tax payment, or with respect to the period from the date that the indemnitor received a Tax Benefit to the date indemnitor paid the Tax Benefit to the indemnitee, the interest payment shall be treated as interest expense to the indemnitor (deductible to the extent provided by law) and as interest income by the indemnitee (includible in income to the extent provided by law). The amount of the payment shall not be adjusted under Section 14.02 to take into account any associated Tax Benefit to the indemnitor or increase in Tax to the indemnitee.

SECTION 15. *Disagreements.* If after good faith negotiations the parties cannot agree on the application of this Agreement to any matter, then the matter will be referred to a nationally recognized accounting firm acceptable to each of the parties (the "Accounting Firm"). The Accounting Firm shall furnish written notice to the parties of its resolution of any such disagreement as soon as practical, but in any event no later than 45 days after its acceptance of the matter for resolution. Any such resolution by the Accounting Firm will be conclusive and binding on all parties to this Agreement. In accordance with Section 17, each party shall pay its own fees and expenses (including the fees and expenses of its representatives) incurred in connection with the referral of the matter to the Accounting Firm. All fees and expenses of the Accounting Firm in connection with such referral shall be shared equally by the parties affected by the matter.

SECTION 16. *Late Payments.* Any amount owed by one party to another party under this Agreement which is not paid when due shall bear interest at the Prime Rate plus two percent, compounded semiannually, from the due date of the payment to the date paid. To the extent interest required to be paid under this Section 16 duplicates interest required to be paid under any other provision of this Agreement, interest shall be computed at

the higher of the interest rate provided under this Section 16 or the interest rate provided under such other provision.

SECTION 17. *Expenses.* Except as provided in Section 15, each party and its Affiliates shall bear their own expenses incurred in connection with preparation of Tax Returns, Tax Contests, and other matters related to Taxes under the provisions of this Agreement.

SECTION 18. *Special Rules for Determining Members of Groups.* For purposes of this Agreement, the following special rules shall apply for determining the members of the Industrial Group and members of the Shipbuilding Group:

18.01 *Tennessee Gas Pipeline Company.* The assets and activities of Tennessee Gas Pipeline Company for Pre-Distribution Periods that comprise the Walker Manufacturing Company Division, the Tenneco Automotive Headquarters Division, and the Tenneco Brakes Division, as jointly determined by Industrial Company and Tenneco in accordance with past practices, shall be combined and treated as a separate corporate entity which is a member of the Industrial Group.

18.02 *Former Affiliates of Shipbuilding Group or Industrial Group.* The entities listed on Schedule 1 attached hereto shall be treated as members of the Shipbuilding Group, and the entities listed on Schedule 2 attached hereto shall be treated as members of the Industrial Group. Any entity substantially all of the assets and liabilities of which have been transferred to a member of the Shipbuilding Group (e.g., by a statutory merger) shall be treated as a member of the Shipbuilding Group, and any entity substantially all of the assets and liabilities of which have been transferred to a member of the Industrial Group shall be treated as a member of the Industrial Group. For example, Newport News Shipbuilding and Dry Dock Company, a Virginia corporation, shall, by virtue of its merger into Tenneco InterAmerica Inc., be treated as a member of the Shipbuilding Group. For purposes of this paragraph, Tenneco's Affiliates shall not be limited to persons who are Affiliates immediately after the Distributions.

SECTION 19. *General Provisions*

19.01 *Addresses and Notices.* Any notice, demand, request or report required or permitted to be given or made to any party under this Agreement shall be in writing and shall be deemed given or made when delivered in party or when sent by first class mail or by other commercially reasonable means of written communication (including delivery by an internationally recognized courier service or by facsimile transmission) to the party at the party's address as follows:

If to Shipbuilding Company:

Director, Taxes
Newport News Shipbuilding and Dry Dock Company
4101 Washington Avenue
Newport News, VA 23607

If to Tenneco:

Director, Taxes
Tennessee Gas Pipeline Co.
1010 Milam Street
Houston, Texas 77002

With a copy to:

Director, Taxes
El Paso Natural Gas Co.
One Paul Kayser Center
100 North Stanton Street
El Paso, Texas 79901

If to Industrial Company:

Robert G. Simpson
Vice President, Tax
Tenneco Inc.
1275 King Street
Greenwich, CT 06831

If to Acquiror:

Director, Taxes
El Paso Natural Gas Co.
One Paul Kayser Center
100 North Stanton Street
El Paso, Texas 79901

A party may change the address for receiving notices under this Agreement by providing written notice of the change of address to the other parties.

19.02 Binding Effect. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their successors and assigns.

19.03 Waiver. No failure by any party to insist upon the strict performance of any obligation under this Agreement or to exercise any right or remedy under this Agreement shall constitute waiver of any such obligation, right, or remedy or any other obligation, rights, or remedies under this Agreement.

19.04 Invalidity of Provisions. If any provision of this Agreement is or becomes invalid, illegal or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions contained herein shall not be affected thereby.

19.05 Further Action. The parties shall execute and deliver all documents, provide all information, and take or refrain from taking action as may be necessary or appropriate to achieve the purposes of this Agreement, including the execution and delivery to the other parties and their Affiliates and representatives of such powers of attorney or other authorizing documentation as is reasonably necessary or appropriate in connection with Tax Contests (or portions thereof) under the control of such other parties in accordance with Section 9.

19.06 Integration. This Agreement constitutes the entire agreement among the parties pertaining to the subject matter of this Agreement and supersedes all prior agreements and understandings pertaining thereto. In the event of any inconsistency between this Agreement and the Distribution Agreement or any other agreements relating to the transactions contemplated by the Distribution Agreement, the provisions of this Agreement shall control.

19.07 Construction. The language in all parts of this Agreement shall in all cases be construed according to its fair meaning and shall not be strictly construed for or against any party.

19.08 No Double Recovery; Subrogation. No provision of this Agreement shall be construed to provide an indemnity or other recovery for any costs, damages, or other amounts for which the damaged party has been fully compensated under any other provision of this Agreement or under any other agreement or action at law or equity. Unless expressly required in this Agreement, a party shall not be required to exhaust all remedies available under other agreements or at law or equity before recovering under the remedies provided in this Agreement. Subject to any limitations provided in this Agreement (for example, the limitation on filing claims for refund in Section 4.08), the indemnifying party shall be subrogated to all rights of the indemnified party for recovery from any third party.

19.09 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, and all of which taken together shall constitute one and the same instrument.

19.10 *Governing Law.* This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware applicable to contracts executed in and to be performed in that State.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by the respective officers as of the date set forth above.

TENNECO INC.

By: _____

Its: _____

NEWPORT NEWS SHIPBUILDING INC.

By: _____

Its: _____

NEW TENNECO INC.

By: _____

Robert G. Simpson
Vice President, Taxes

EL PASO NATURAL GAS COMPANY

By: _____

Its: _____

TAX SHARING AGREEMENT

SCHEDULE 1

Additional Members of the Shipbuilding Group

For purposes of this Agreement, in addition to Shipbuilding Company and its Affiliates as determined immediately after the Distribution Date, the Shipbuilding Group shall be deemed to include any corporation which was (1) a member of the affiliated group (as defined in Code Section 1504(a), but treating all corporations as "includible corporations" for purposes of such Code Section) of which Tenneco is the common parent, (2) was included in the "shipbuilding" segment for purposes of segment reporting in Tenneco's Annual Reports on Form 10-K, and (3) sold, transferred, otherwise disposed of, or discontinued prior to the date hereof. Without limiting the foregoing, the Shipbuilding Group shall include:

- Sperry Marine Inc.
- Sperry Marine-Asia Inc.
- Sperry Marine (S) PTE Ltd. (Singapore)
- Sperry Marine S.p.A. (Italy)
- Sperry Marine S.A.R.L. (France)
- Sperry Marine Limited (United Kingdom)
- Sperry Marine GmbH (Germany)
- Sperry Marine A/S (Denmark)
- Sperry Marine A/S (Norway)
- Sperry Marine B.V. (Netherlands)

TAX SHARING AGREEMENT

SCHEDULE 2

Additional Members of the Industrial Group

For purposes of this Agreement, in addition to Industrial Company and its Affiliates as determined immediately after the Distribution Date, the Industrial Group shall be deemed to include any corporation which was (1) a member of the affiliated group (as defined in Code Section 1504(a), but treating all corporations as "includible corporations" for purposes of such Code Section) of which Tenneco is the common parent, (2) was included in the "automotive parts" or "packaging" segment for purposes of segment reporting in Tenneco's Annual Reports on Form 10-K, and (3) sold, transferred, otherwise disposed of, or discontinued prior to the date hereof.

TAX SHARING AGREEMENT

SCHEDULE 3

Energy Investments Group

KERN COUNTY LAND COMPANY
PETRO-TEX CHEMICAL CORPORATION
TENFAC CORPORATION
TENNCHASE, INC.
TENNECO COAL COMPANY
TENNECO CORPORATION
TENNECO CREDIT CORPORATION
TENNECO EQUIPMENT CORPORATION (f/k/a Case Corporation)
TENNECO EQUIPMENT HOLDING IV CO. (f/k/a Case Finance Co.)
TENNECO EQUIPMENT HOLDING V CO. (f/k/a Integrated Technical Systems, Inc.)
TENNECO EQUIPMENT HOLDING VI CO. (f/k/a Viscosity Oil Co.)
TENNECO INC.
TENNECO INSURANCE VENTURES
TENNECO INTERAMERICA, INC.
TENNECO INTERNATIONAL, INC.
TENNECO MINERALS COMPANY—CALIFORNIA
TENNECO MINERALS COMPANY—NEVADA
TENNECO OIL COMPANY
TENNECO POLYMERS, INC.
TENNECO SHALE OIL COMPANY
TENNECO SNG, INC.
TENNECO SYNFUELS COMPANY
TENNECO WEST
TENNESSEE GAS PIPELINE COMPANY—CORPORATE DIVISION

**EXHIBIT L
TO
DISTRIBUTION AGREEMENT
TBS SERVICES AGREEMENT**

**[To be Negotiated Among TBS, Industrial Company
and Shipbuilding Company]**

M

KMI0000441

**EXHIBIT M TO
DISTRIBUTION AGREEMENT**

TRANSITION SERVICES AGREEMENT

Transition Services Agreement (this "Agreement") dated as of June 19, 1996, between Tenneco Business Services, Inc. ("TBS"), Tenneco Inc. ("Tenneco") and El Paso Natural Gas Company ("EPG").

WHEREAS, TBS currently provides certain business services to Tenneco, including mainframe computing services, backup, recovery and related operations, consulting services and payroll services (collectively, the "Services"); and

WHEREAS, Tenneco may desire to continue certain of the Services following the consummation of the merger (the "Merger") contemplated by the Agreement and Plan of Merger dated as of June 19, 1996 among EPG, El Paso Merger Company and Tenneco ("the Merger Agreement");

NOW, THEREFORE, the parties hereto agree as follows:

1. *Notice.* No later than 45 days prior to the Effective Time (as defined in the Merger Agreement) but only if and to the extent requested to do so by EPG, Tenneco shall notify TBS in writing of its election to continue Services following the Merger. This Agreement shall be of no further force or effect if such notice is not received prior to the time provided in the preceding sentence.

2. *Services; Term.* If Tenneco exercises the election set forth in paragraph 1 above, TBS shall provide the Services specified in the notice delivered by Tenneco for a period of twelve months from the date of the Merger; provided that any or all of the Services may be terminated by Tenneco at any time on not less than 45 days' prior written notice to TBS. The Services shall be performed in a manner consistent with the manner in which they have heretofore been performed by TBS. TBS will also assist Tenneco in transferring data from TBS' systems and establishing interconnection between TBS' and Tenneco's or EPG's mainframes and otherwise in transferring the operations performed by TBS on behalf of Tenneco to Tenneco's or EPG's systems.

3. *Compensation.* The price that Tenneco shall pay to TBS for the Services shall be a mutually agreed to market-based rate for comparable services. TBS shall invoice Tenneco monthly for the Services, providing a breakdown of the Services for such month and the charges for each category of Services. In the event of any dispute with respect to amounts payable under this Agreement, the parties shall work together in good faith to resolve such dispute and, if the parties are unable to resolve such dispute, it shall be referred to an independent accounting firm mutually agreed by TBS and Tenneco.

4. *Consents of Third Parties.* TBS shall use commercially reasonable efforts, at Tenneco's direction and expense, to obtain any consents or software licenses from third parties necessary to the continuation of the requested Services; provided that TBS shall have no obligation to provide Services for which such consent is required and shall not have been obtained.

5. *Limitations.* TBS shall not be liable for any consequential, incidental, special or punitive damages in connection with the Services.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date set forth above.

TENNECO BUSINESS SERVICES, INC.

By _____

TENNECO INC.

By _____

EL PASO NATURAL GAS COMPANY

By _____

N

KMI0000444

EXHIBIT N

**RESTATED CERTIFICATE OF INCORPORATION
OF
NEW TENNECO INC.**

* * * * *

The present name of the corporation is New Tenneco Inc. The corporation was incorporated under that name by the filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware on August 26, 1996. This Restated Certificate of Incorporation of the corporation, which both restates and further amends the provisions of the corporation's Certificate of Incorporation, was duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware and by the written consent of its sole stockholder in accordance with Section 228 of the General Corporation Law of the State of Delaware. The Certificate of Incorporation of the corporation is hereby amended and restated to read in its entirety as follows:

FIRST: The name of the corporation is New Tenneco Inc.

SECOND: The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: A. The total number of shares of all classes of stock which the corporation shall be authorized to issue is 400,000,000 shares, divided into 350,000,000 shares of Common Stock, par value \$.01 per share (herein called "Common Stock"), and 50,000,000 shares of Preferred Stock, par value \$.01 per share (herein called "Preferred Stock").

B. The Board of Directors of the corporation (the "Board of Directors") is hereby expressly authorized, by resolution or resolutions thereof, to provide, out of the unissued shares of Preferred Stock, for series of Preferred Stock and, with respect to each such series, to fix the number of shares constituting such series and the designation of such series, the voting powers (if any) of the shares of such series, and the preferences and relative, participating, optional or other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series. The powers, preferences and relative, participating, optional and other special rights of each series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding.

C. Except as may otherwise be provided in this Restated Certificate of Incorporation (including any certificate filed with the Secretary of State of the State of Delaware establishing the terms of a series of Preferred Stock in accordance with Section B of this Article FOURTH) or by applicable law, each holder of Common Stock, as such, shall be entitled to one vote for each share of Common Stock held of record by such holder on all matters on which stockholders generally are entitled to vote, and no holder of any series of Preferred Stock, as such, shall be entitled to any voting powers in respect thereof.

D. Subject to applicable law and the rights, if any, of the holders of any outstanding series of Preferred Stock, dividends may be declared and paid on the Common Stock at such times and in such amounts as the Board of Directors in its discretion shall determine.

E. Upon the dissolution, liquidation or winding up of the corporation, subject to the rights, if any, of the holders of any outstanding series of Preferred Stock, the holders of the Common Stock shall be entitled to receive the assets of the corporation available for distribution to its stockholders ratably in proportion to the number of shares held by them.

F. The corporation shall be entitled to treat the person in whose name any share of its stock is registered as the owner thereof for all purposes and shall not be bound to recognize any equitable or other claim to, or interest in, such share on the part of any other person, whether or not the corporation shall have notice thereof, except as expressly provided by applicable law.

FIFTH: A. The business and affairs of the corporation shall be managed by or under the direction of the Board of Directors consisting of not less than eight nor more than sixteen directors, with the exact number of directors constituting the entire Board of Directors to be determined from time to time by resolution adopted by the affirmative vote of a majority of the entire Board of Directors. For purposes of this Restated Certificate of Incorporation, "the entire Board of Directors" shall mean the number of directors that would be in office if there were no vacancies nor any unfilled newly created directorships.

The Board of Directors shall be divided into three classes, Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the number of directors constituting the entire Board of Directors. Class I directors shall be initially elected for a term expiring at the first succeeding annual meeting of stockholders, Class II directors shall be initially elected for a term expiring at the second succeeding annual meeting of stockholders, and Class III directors shall be initially elected for a term expiring at the third succeeding annual meeting of stockholders. At each annual meeting of the stockholders following 1996, successors to the class of directors whose term expires at that annual meeting shall be elected for a term expiring at the third succeeding annual meeting of stockholders. If the number of directors is changed, any increase or decrease shall be apportioned among the classes so as to maintain the number of directors in each class as nearly equal as possible, and any additional director of any class elected to fill a newly created directorship resulting from an increase in such class shall hold office for a term that shall coincide with the remaining term of that class, but in no case shall a decrease in the number of directors shorten the term of any incumbent director. A director shall hold office until the annual meeting for the year in which his term expires and until his successor shall be elected and shall qualify, subject, however, to prior death, resignation, retirement, disqualification or removal from office. Any vacancy on the Board of Directors that results from an increase in the number of directors may be filled by a majority of the Board of Directors then in office, provided that a quorum is present, and any other vacancy occurring in the Board of Directors may be filled by a majority of the directors then in office, even if less than a quorum, or by a sole remaining director. Directors chosen to fill any such vacancy shall hold office for a term expiring at the annual meeting of stockholders at which the term of office of the class to which they have been elected expires and until such director's successor shall have been duly elected and qualified.

Notwithstanding the foregoing, whenever the holders of any one or more series of Preferred Stock shall have the right, voting separately as a class or series, to elect directors, the election, removal, term of office, filling of vacancies and other features of such directorships shall be governed by the terms of this Restated Certificate of Incorporation applicable thereto, and such directors so elected shall not be divided into classes pursuant to this Article FIFTH unless expressly provided by such terms.

B. The Board of Directors shall be authorized to adopt, make, amend, alter, change, add to or repeal the By-Laws of the corporation, subject to the power of the stockholders to amend, alter, change, add to or repeal the By-Laws made by the Board of Directors.

C. Unless and except to the extent that the By-Laws of the corporation shall so require, the election of directors of the corporation need not be by written ballot.

SIXTH: A. In addition to any affirmative vote required by law or this Restated Certificate of Incorporation or the By-Laws of the corporation, and except as otherwise expressly provided in Section B of this Article SIXTH, a Business Combination (as hereinafter defined) with, or proposed by or on behalf of, any Interested Stockholder (as hereinafter defined) or any Affiliate or Associate (as hereinafter defined) of any Interested Stockholder or any person who thereafter would be an Affiliate or Associate of such Interested Stockholder shall, except as otherwise prohibited by applicable law, require the affirmative vote of not less than 66 2/3 % of the votes

entitled to be cast by the holders of all the then outstanding shares of Voting Stock (as hereinafter defined), voting together as a single class, excluding Voting Stock beneficially owned by any Interested Stockholder. Such affirmative vote shall be required notwithstanding the fact that no vote may be required, or that a lesser percentage or separate class vote may be specified, by law or in any agreement with any national securities exchange or otherwise.

B. The provisions of Section A of this Article SIXTH shall not be applicable to any particular Business Combination, and such Business Combination shall require only such affirmative vote, if any, as is required by law or by any other provision of this Restated Certificate of Incorporation or the By-Laws of the corporation, or any agreement with any national securities exchange, if all of the conditions specified in either of the following Paragraphs 1 or 2 are met or, in the case of a Business Combination not involving the payment of consideration to the holders of the corporation's outstanding Capital Stock (as hereinafter defined), if the condition specified in the following Paragraph 1 is met:

1. The Business Combination shall have been approved, either specifically or as a transaction which is within an approved category of transactions, by a majority (whether such approval is made prior to or subsequent to the acquisition of, or announcement or public disclosure of the intention to acquire, beneficial ownership of the Voting Stock that caused the Interested Stockholder to become an Interested Stockholder) of the Continuing Directors (as hereinafter defined).

2. All of the following conditions shall have been met:

a. the aggregate amount of cash and the Fair Market Value (as hereinafter defined), as of the date of the consummation of the Business Combination, of consideration other than cash to be received per share by holders of Common Stock in such Business Combination shall be at least equal to the highest amount determined under clauses (i) and (ii) below:

(i) (if applicable) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by or on behalf of the Interested Stockholder for any share of Common Stock in connection with the acquisition by the Interested Stockholder of beneficial ownership of shares of Common Stock (x) within the two-year period immediately prior to the first public announcement of the proposed Business Combination (the "Announcement Date") or (y) in the transaction in which it became an Interested Stockholder, whichever is higher, in either case as adjusted for any subsequent stock split, stock dividend, subdivision or reclassification with respect to Common Stock; and

(ii) the Fair Market Value per share of Common Stock on the Announcement Date or on the date on which the Interested Stockholder became an Interested Stockholder (the "Determination Date"), whichever is higher, as adjusted for any subsequent stock split, stock dividend, subdivision or reclassification with respect to Common Stock.

b. The aggregate amount of cash and the Fair Market Value, as of the date of the consummation of the Business Combination, of consideration other than cash to be received per share by holders of shares of any class or series of outstanding Capital Stock, other than Common Stock, shall be at least equal to the highest amount determined under clauses (i), (ii), (iii) and (iv) below:

(i) (if applicable) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by or on behalf of the Interested Stockholder for any share of such class or series of Capital Stock in connection with the acquisition by the Interested Stockholder of beneficial ownership of shares of such class or series of Capital Stock (x) within the two-year period immediately prior to the Announcement Date, or (y) in the transaction in which it became an Interested Stockholder, whichever is higher, in either case as adjusted for any subsequent stock split, stock dividend, subdivision or reclassification with respect to such class or series of Capital Stock;

(ii) the Fair Market Value per share of such class or series of Capital Stock on the Announcement Date or on the Determination Date, whichever is higher, as adjusted for any

subsequent stock split, stock dividend, subdivision or reclassification with respect to such class or series of Capital Stock;

(iii) (if applicable) the price per share equal to the Fair Market Value per share of such class or series of Capital Stock determined pursuant to the immediately preceding clause (ii), multiplied by the ratio of (x) the highest per share price (including any brokerage commissions, transfer taxes and soliciting dealers' fees) paid by or on behalf of the Interested Stockholder for any share of such class or series of Capital Stock in connection with the acquisition by the Interested Stockholder of beneficial ownership of shares of such class or series of Capital Stock within the two-year period immediately prior to the Announcement Date, as adjusted for any subsequent stock split, stock dividend, subdivision or reclassification with respect to such class or series of Capital Stock to (y) the Fair Market Value per share of such class or series of Capital Stock on the first day in such two-year period on which the Interested Stockholder acquired beneficial ownership of any share of such class or series of Capital Stock, as adjusted for any subsequent stock split, stock dividend, subdivision or reclassification with respect to such class or series of Capital Stock; and

(iv) (if applicable) the highest preferential amount per share to which the holders of shares of such class or series of Capital Stock would be entitled in the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the corporation regardless of whether the Business Combination to be consummated constitutes such an event.

The provisions of this Paragraph 2 shall be required to be met with respect to every class or series of outstanding Capital Stock, whether or not the Interested Stockholder has previously acquired beneficial ownership of any shares of a particular class or series of Capital Stock.

c. The consideration to be received by holders of a particular class or series of outstanding Capital Stock shall be in cash or in the same form as previously has been paid by or on behalf of the Interested Stockholder in connection with its direct or indirect acquisition of beneficial ownership of shares of such class or series of Capital Stock. If the consideration so paid for shares of any class or series of Capital Stock varied as to form, the form of consideration for such class or series of Capital Stock shall be either cash or the form used to acquire beneficial ownership of the largest number of shares of such class or series of Capital Stock previously acquired by the Interested Stockholder.

d. After the Determination Date and prior to the consummation of such Business Combination: (i) except as approved by a majority of the Continuing Directors, there shall have been no failure to declare and pay at the regular date therefor any full quarterly dividends (whether or not cumulative) payable in accordance with the terms of any outstanding Capital Stock; (ii) there shall have been no reduction in the annual rate of dividends paid on the Common Stock (except as necessary to reflect any stock split, stock dividend or subdivision of the Common Stock), except as approved by a majority of the Continuing Directors; (iii) there shall have been an increase in the annual rate of dividends paid on the Common Stock as necessary to reflect any reclassification (including any reverse stock split), recapitalization, reorganization or any similar transaction that has the effect of reducing the number of outstanding shares of Common Stock, unless the failure so to increase such annual rate is approved by a majority of the Continuing Directors; and (iv) such Interested Stockholder shall not have become the beneficial owner of any additional shares of Capital Stock except as part of the transaction that results in such Interested Stockholder becoming an Interested Stockholder and except in a transaction that, after giving effect thereto, would not result in any increase in the Interested Stockholder's percentage beneficial ownership of any class or series of Capital Stock.

e. A proxy or information statement describing the proposed Business Combination and complying with the requirements of the Securities Exchange Act of 1934 and the rules and regulations thereunder (the "Act") (or any subsequent provisions replacing such Act, rules or regulations) shall be mailed to all stockholders of the corporation at least 30 days prior to the consummation of such Business Combination (whether or not such proxy or information statement is required to be mailed pursuant to such Act or subsequent provisions). The proxy or information statement shall contain on

the first page thereof, in a prominent place, any statement as to the advisability (or inadvisability) of the Business Combination that the Continuing Directors, or any of them, may choose to make and, if deemed advisable by a majority of the Continuing Directors, the opinion of an investment banking firm selected by a majority of the Continuing Directors as to the fairness (or not) of the terms of the Business Combination from a financial point of view to the holders of the outstanding shares of Capital Stock other than the Interested Stockholder and its Affiliates or Associates (as hereinafter defined), such investment banking firm to be paid a reasonable fee for its services by the corporation.

f. Such Interested Stockholder shall not have made any major change in the corporation's business or equity capital structure without the approval of a majority of the Continuing Directors.

C. The following definitions shall apply with respect to this Article SIXTH:

1. The term "Business Combination" shall mean:

a. any merger or consolidation of the corporation or any Subsidiary (as hereinafter defined) with (i) any Interested Stockholder or (ii) any other company (whether or not itself an Interested Stockholder) which is or after such merger or consolidation would be an Affiliate or Associate of an Interested Stockholder; or

b. any sale, lease, exchange, mortgage, pledge, transfer or other disposition or security arrangement, investment, loan, advance, guarantee, agreement to purchase, agreement to pay, extension of credit, joint venture participation or other arrangement (in one transaction or a series of transactions) with or for the benefit of any Interested Stockholder or any Affiliate or Associate of any Interested Stockholder involving any assets, securities or commitments of the corporation, any Subsidiary or any Interested Stockholder or any Affiliate or Associate of any Interested Stockholder which (except for any arrangement, whether as employee, consultant or otherwise, other than as a director, pursuant to which any Interested Stockholder or any Affiliate or Associate thereof shall, directly or indirectly, have any control over or responsibility for the management of any aspect of the business or affairs of the corporation, with respect to which arrangements the value tests set forth below shall not apply), together with all other such arrangements (including all contemplated future events), has an aggregate Fair Market Value and/or involves aggregate commitments of \$25,000,000 or more or constitutes more than five percent of the book value of the total assets (in the case of transactions involving assets or commitments other than capital stock) or five percent of the stockholders' equity (in the case of transactions in capital stock) of the entity in question (the "Substantial Part"), as reflected in the most recent fiscal year-end consolidated balance sheet of such entity existing at the time the stockholders of the corporation would be required to approve or authorize the Business Combination involving the assets, securities and/or commitments constituting any Substantial Part; or

c. the adoption of any plan or proposal for the liquidation or dissolution of the corporation or for any amendment to the corporation's By-Laws; or

d. any reclassification of securities (including any reverse stock split), or recapitalization of the corporation, or any merger or consolidation of the corporation with any of its Subsidiaries or any other transaction (whether or not with or otherwise involving an Interested Stockholder) that has the effect, directly or indirectly, of increasing the proportionate share of any class or series of Capital Stock, or any securities convertible into Capital Stock or into equity securities of any Subsidiary, that is beneficially owned by any Interested Stockholder or any Affiliate or Associate of any Interested Stockholder, or

e. any agreement, contract or other arrangement providing for any one or more of the actions specified in the foregoing clauses (a) to (d).

2. The term "Capital Stock" shall mean all capital stock of the corporation authorized to be issued from time to time under Article FOURTH of this Restated Certificate of Incorporation, and the term "Voting Stock" shall mean all Capital Stock which by its terms may be voted on all matters submitted to stockholders of the corporation generally.

3. The term "person" shall mean any individual, firm, company or other entity and shall include any group comprised of any person and any other person with whom such person or any Affiliate or Associate of such person has any agreement, arrangement or understanding, directly or indirectly, for the purpose of acquiring, holding, voting or disposing of Capital Stock.

4. The term "Interested Stockholder" shall mean any person (other than (i) the corporation or any Subsidiary, any profit-sharing, employee stock ownership or other employee benefit plan of the corporation or any Subsidiary or any trustee or fiduciary with respect to any such plan or holding Voting Stock for the purpose of funding any such plan or funding other employee benefits for employees of the corporation or any Subsidiary when acting in such capacity, and (ii) until immediately following the Industrial Distribution (as defined in the Distribution Agreement, dated as of _____, 1996, among the corporation, Newport News Shipbuilding Inc., a Delaware corporation, and the corporation known as of the date thereof as Tenneco Inc., a Delaware corporation ("Old Tenneco")), Old Tenneco or any subsidiary of Old Tenneco) who (a) is or has announced or publicly disclosed a plan or intention to become the beneficial owner of Voting Stock representing five percent or more of the votes entitled to be cast by the holders of all then outstanding shares of Voting Stock; or (b) is an Affiliate or Associate of the corporation and at any time within the two-year period immediately prior to the date in question was the beneficial owner of Voting Stock representing five percent or more of the votes entitled to be cast by the holders of all then outstanding shares of Voting Stock.

5. A person shall be a "beneficial owner" of any Capital Stock (a) which such person or any of its Affiliates or Associates beneficially owns, directly or indirectly; (b) which such person or any of its Affiliates or Associates has, directly or indirectly, (i) the right to acquire (whether such right is exercisable immediately or subject only to the passage of time), pursuant to any agreement, arrangement or understanding or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise, or (ii) the right to vote pursuant to any agreement, arrangement or understanding; or (c) which are beneficially owned, directly or indirectly, by any other person with which such person or any of its Affiliates or Associates has any agreement, arrangement or understanding for the purpose of acquiring, holding, voting or disposing of any shares of Capital Stock. For the purposes of determining whether a person is an Interested Stockholder pursuant to Paragraph 4 of this Section C, the number of shares of Capital Stock deemed to be outstanding shall include shares deemed beneficially owned by such person through application of this Paragraph 5 of Section C, but shall not include any other shares of Capital Stock that may be issuable pursuant to any agreement, arrangement or understanding, or upon exercise of conversion rights, warrants or options, or otherwise. Notwithstanding the foregoing, for purposes of this Article SIXTH, a person shall not be deemed a "beneficial owner" of any Capital Stock which such person has the right to acquire upon exercise of the Rights issued pursuant to the Rights Agreement, dated as of _____, 1996, between the corporation and First Chicago Trust Company of New York (including any successor rights plan thereto, the "Rights Agreement"), if such person would not be deemed the beneficial owner of such Capital Stock under the terms of such Rights Agreement.

6. The terms "Affiliate" and "Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 under the Act as in effect on _____, 1996 (the term "registrant" in said Rule 12b-2 meaning in this case the corporation).

7. The term "Subsidiary" means any company of which a majority of any class of equity securities are beneficially owned by the corporation; provided, however, that for the purposes of the definition of Interested Stockholder set forth in Paragraph 4 of this Section C, the term "Subsidiary" shall mean only a company of which a majority of each class of equity security is beneficially owned by the corporation.

8. The term "Continuing Director" means any member of the Board of Directors, while such person is a member of the Board of Directors, who is not an Affiliate or Associate or representative of the Interested Stockholder and was a member of the Board of Directors prior to the time that the Interested Stockholder became an Interested Stockholder, and any successor of a Continuing Director while such successor is a member of the Board of Directors, who is not an Affiliate or Associate or representative of the Interested

Stockholder and is recommended or elected to succeed the Continuing Director by a majority of Continuing Directors.

9. The term "Fair Market Value" means (a) in the case of cash, the amount of such cash; (b) in the case of stock, the highest closing sale price during the 30-day period immediately preceding the date in question of a share of such stock on the Composite Tape for New York Stock Exchange-Listed Stocks, or, if such stock is not quoted on the Composite Tape, on the New York Stock Exchange, or, if such stock is not listed on such Exchange, on the principal United States securities exchange registered under the Act on which such stock is listed, or, if such stock is not listed on any such exchange, the highest closing bid quotation with respect to a share of such stock during the 30-day period preceding the date in question on The Nasdaq Stock Market or any similar system then in use, or if no such quotations are available, the fair market value on the date in question of a share of such stock as determined by a majority of the Continuing Directors in good faith; and (c) in the case of property other than cash or stock, the fair market value of such property on the date in question as determined in good faith by a majority of the Continuing Directors.

10. In the event of any Business Combination in which the corporation survives, the phrase "consideration other than cash to be received" as used in Paragraphs 2.a and 2.b of Section B of this Article SIXTH shall include the shares of Common Stock and/or the shares of any other class or series of Capital Stock retained by the holders of such shares.

D. A majority of the Continuing Directors shall have the power and duty to determine for the purposes of this Article SIXTH, on the basis of information known to them after reasonable inquiry, all questions arising under this Article SIXTH, including, without limitation, (a) whether a person is an Interested Stockholder, (b) the number of shares of Capital Stock or other securities beneficially owned by any person, (c) whether a person is an Affiliate or Associate of another, (d) whether a Proposed Action is with, or proposed by, or on behalf of an Interested Stockholder or an Affiliate or Associate of an Interested Stockholder, (e) whether the assets that are the subject of any Business Combination have, or the consideration to be received for the issuance or transfer of securities by the corporation or any Subsidiary in any Business Combination has, an aggregate Fair Market Value of \$25,000,000 or more, and (f) whether the assets or securities that are the subject of any Business Combination constitute a Substantial Part. Any such determination made in good faith shall be binding and conclusive on all parties.

E. Nothing contained in this Article SIXTH shall be construed to relieve any Interested Stockholder from any fiduciary obligation imposed by law.

F. The fact that any Business Combination complies with the provisions of Section B of this Article SIXTH shall not be construed to impose any fiduciary duty, obligation or responsibility on the Board of Directors, or any member thereof, to approve such Business Combination or recommend its adoption or approval to the stockholders of the corporation, nor shall such compliance limit, prohibit or otherwise restrict in any manner the Board of Directors, or any member thereof, with respect to evaluations of or actions and responses taken with respect to such Business Combination.

G. For the purposes of this Article SIXTH, a Business Combination or any proposal to amend or repeal, or to adopt any provision of this Restated Certificate of Incorporation inconsistent with, this Article SIXTH (collectively, "Proposed Action"), is presumed to have been proposed by or on behalf of an Interested Stockholder or an Affiliate or Associate of an Interested Stockholder or a person who thereafter would become such if (1) after the Interested Stockholder became such, the Proposed Action is proposed following the election of any director of the corporation who with respect to such Interested Stockholder would not qualify to serve as a Continuing Director or (2) such Interested Stockholder, Affiliate, Associate or person votes for or consents to the adoption of any such Proposed Action, unless as to such Interested Stockholder, Affiliate, Associate or person a majority of the Continuing Directors makes a good faith determination that such Proposed Action is not proposed by or on behalf of such Interested Stockholder, Affiliate, Associate or person, based on information known to them after reasonable inquiry.

H. Notwithstanding any other provisions of this Restated Certificate of Incorporation or the By-Laws of the corporation (and notwithstanding the fact that a lesser percentage or separate class vote may be specified by law, this Restated Certificate of Incorporation or the By-Laws of the corporation), any proposal to amend or repeal, or to adopt any provision of this Restated Certificate of Incorporation inconsistent with, this Article SIXTH which is proposed by or on behalf of an Interested Stockholder or an Affiliate or Associate of an Interested Stockholder shall require the affirmative vote of the holders of not less than 66⅔% of the votes entitled to be cast by the holders of all the then outstanding shares of Voting Stock, voting together as a single class, excluding Voting Stock beneficially owned by any Interested Stockholder, provided, however, that this Section H shall not apply to, and such 66⅔% vote shall not be required for, any amendment or repeal of, or the adoption of any provision inconsistent with, this Article SIXTH unanimously recommended by the Board of Directors if all of such directors are persons who would be eligible to serve as Continuing Directors within the meaning of Paragraph 8 of Section C of this Article SIXTH.

SEVENTH: A director of the corporation shall not be liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the General Corporation Law of the State of Delaware as the same exists or may hereafter be amended. Any amendment, modification or repeal of the foregoing sentence shall not adversely affect any right or protection of a director of the corporation hereunder in respect of any act or omission occurring prior to the time of such amendment, modification or repeal.

EIGHTH: Subject to the provisions of this Restated Certificate of Incorporation and applicable law, the corporation reserves the right at any time and from time to time to amend, alter, change or repeal any provision contained in this Restated Certificate of Incorporation, and any other provisions authorized by the laws of the State of Delaware at the time in force may be added or inserted, in the manner now or hereafter prescribed herein or by applicable law, and all rights, preferences and privileges of whatsoever nature conferred upon stockholders, directors or any other persons whomsoever by and pursuant to this Restated Certificate of Incorporation in its present form or as hereafter amended are granted subject to the right reserved in this Article EIGHTH.

IN WITNESS WHEREOF, the undersigned has executed this Restated Certificate of Incorporation this day of _____, 1996.

NEW TENNECO INC.

By: _____
Name:
Office:

**RESTATED CERTIFICATE OF INCORPORATION
OF
NEWPORT NEWS SHIPBUILDING INC.**

The present name of the corporation is Newport News Shipbuilding Inc. The corporation was incorporated under the name "Dixemer Petroleum Corporation" by the filing of its original Certificate of Incorporation with the Secretary of State of the State of Delaware on June 16, 1965. This Restated Certificate of Incorporation of the corporation, which both restates and further amends the provisions of the corporation's Certificate of Incorporation, was duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware and by the written consent of its sole stockholder in accordance with Section 228 of the General Corporation Law of the State of Delaware. The Certificate of Incorporation of the corporation is hereby amended and restated to read in its entirety as follows:

FIRST: The name of the corporation is Newport News Shipbuilding Inc.

SECOND: The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD: The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: A. The total number of shares of all classes of stock which the corporation shall be authorized to issue is 80,000,000 shares, divided into 70,000,000 shares of Common Stock, par value \$.01 per share (herein called "Common Stock"), and 10,000,000 shares of Preferred Stock, par value \$.01 per share (herein called "Preferred Stock").

B. The Board of Directors of the corporation (the "Board of Directors") is hereby expressly authorized, by resolution or resolutions thereof, to provide, out of the unissued shares of Preferred Stock, for series of Preferred Stock and, with respect to each such series, to fix the number of shares constituting such series and the designation of such series, the voting powers (if any) of the shares of such series, and the preferences and relative, participating, optional or other special rights, if any, and any qualifications, limitations or restrictions thereof, of the shares of such series. The powers, preferences and relative, participating, optional and other special rights of each series of Preferred Stock, and the qualifications, limitations or restrictions thereof, if any, may differ from those of any and all other series at any time outstanding.

C. Except as may otherwise be provided in this Restated Certificate of Incorporation (including any certificate filed with the Secretary of State of the State of Delaware establishing the terms of a series of Preferred Stock in accordance with Section B of this Article FOURTH) or by applicable law, each holder of Common Stock, as such, shall be entitled to one vote for each share of Common Stock held of record by such holder on all matters on which stockholders generally are entitled to vote, and no holder of any series of Preferred Stock, as such, shall be entitled to any voting powers in respect thereof.

D. Subject to applicable law and the rights, if any, of the holders of any outstanding series of Preferred Stock, dividends may be declared and paid on the Common Stock at such times and in such amounts as the Board of Directors in its discretion shall determine.

E. Upon the dissolution, liquidation or winding up of the corporation, subject to the rights, if any, of the holders of any outstanding series of Preferred Stock, the holders of the Common Stock shall be entitled to receive the assets of the corporation available for distribution to its stockholders ratably in proportion to the number of shares held by them.

F. The corporation shall be entitled to treat the person in whose name any share of its stock is registered as the owner thereof for all purposes and shall not be bound to recognize any equitable or other claim to, or interest in, such share on the part of any other person, whether or not the corporation shall have notice thereof, except as expressly provided by applicable law.

FIFTH: A. The business and affairs of the corporation shall be managed by or under the direction of the Board of Directors consisting of not less than three nor more than sixteen directors, with the exact number of directors constituting the entire Board of Directors to be determined from time to time by resolution adopted by the affirmative vote of a majority of the entire Board of Directors. For purposes of this Restated Certificate of Incorporation, "the entire Board of Directors" shall mean the number of directors that would be in office if there were no vacancies nor any unfilled newly created directorships.

The Board of Directors shall be divided into three classes, Class I, Class II and Class III. Each class shall consist, as nearly as may be possible, of one-third of the number of directors constituting the entire Board of Directors. Class I directors shall be initially elected for a term expiring at the first succeeding annual meeting of stockholders, Class II directors shall be initially elected for a term expiring at the second succeeding annual meeting of stockholders, and Class III directors shall be initially elected for a term expiring at the third succeeding annual meeting of stockholders. At each annual meeting of the stockholders following 1996, successors to the class of directors whose term expires at that annual meeting shall be elected for a term expiring at the third succeeding annual meeting of stockholders. If the number of directors is changed, any increase or decrease shall be apportioned among the classes so as to maintain the number of directors in each class as nearly equal as possible, and any additional director of any class elected to fill a newly created directorship resulting from an increase in such class shall hold office for a term that shall coincide with the remaining term of that class, but in no case shall a decrease in the number of directors shorten the term of any incumbent director. A director shall hold office until the annual meeting for the year in which his term expires and until his successor shall be elected and shall qualify, subject, however, to prior death, resignation, retirement, disqualification or removal from office. Any vacancy on the Board of Directors that results from an increase in the number of directors may be filled by a majority of the Board of Directors then in office, provided that a quorum is present, and any other vacancy occurring in the Board of Directors may be filled by a majority of the directors then in office, even if less than a quorum, or by a sole remaining director. Directors chosen to fill any such vacancy shall hold office for a term expiring at the annual meeting of stockholders at which the term of office of the class to which they have been elected expires and until such director's successor shall have been duly elected and qualified.

Notwithstanding the foregoing, whenever the holders of any one or more series of Preferred Stock shall have the right, voting separately as a class or series, to elect directors, the election, removal, term of office, filling of vacancies and other features of such directorships shall be governed by the terms of this Restated Certificate of Incorporation applicable thereto, and such directors so elected shall not be divided into classes pursuant to this Article FIFTH unless expressly provided by such terms.

B. The Board of Directors shall be authorized to adopt, make, amend, alter, change, add to or repeal the By-Laws of the corporation, subject to the power of the stockholders to amend, alter, change, add to or repeal the By-Laws made by the Board of Directors.

C. Unless and except to the extent that the By-Laws of the corporation shall so require, the election of directors of the corporation need not be by written ballot.

SIXTH: A director of the corporation shall not be liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the General Corporation Law of the State of Delaware as the same exists or may hereafter be amended. Any amendment, modification or repeal of the foregoing sentence shall not adversely affect any right or protection of a director of the corporation hereunder in respect of any act or omission occurring prior to the time of such amendment, modification or repeal.

SEVENTH: Subject to the provisions of this Restated Certificate of Incorporation and applicable law, the corporation reserves the right at any time and from time to time to amend, alter, change or repeal any provision contained in this Restated Certificate of Incorporation, and any other provisions authorized by the laws of the State of Delaware at the time in force may be added or inserted, in the manner now or hereafter prescribed herein or by applicable law, and all rights, preferences and privileges of whatsoever nature conferred upon stockholders, directors or any other persons whomsoever by and pursuant to this Restated Certificate of Incorporation in its present form or as hereafter amended are granted subject to the right reserved in this Article SEVENTH.

IN WITNESS WHEREOF, the undersigned has executed this Restated Certificate of Incorporation this
day of , 1996.

NEWPORT NEWS SHIPBUILDING INC.

By: _____
Name:
Office:

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KMI0000456

EXHIBIT O

**BY-LAWS
OF
NEW TENNECO INC.
AMENDED AND RESTATED AS OF , 1996**

ARTICLE I

PLACE OF STOCKHOLDER MEETINGS

Section 1. All meetings of the stockholders of the corporation shall be held at such place or places, within or without the State of Delaware, as may from time to time be fixed by the Board of Directors of the corporation (the "Board"), or as shall be specified or fixed in the respective notices or waivers of notice thereof.

ANNUAL MEETING

Section 2. The Annual Meeting of Stockholders shall be held on such date and at such time as may be fixed by the Board and stated in the notice thereof, for the purpose of electing directors and for the transaction of only such other business as is properly brought before the meeting in accordance with these By-Laws.

To be properly brought before the meeting, business must be either (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board, (b) otherwise properly brought before the meeting by or at the direction of the Board, or (c) otherwise properly brought before the meeting by a stockholder. In addition to any other applicable requirements, for business to be properly brought before the Annual Meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the Secretary of the corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation, not less than 50 days nor more than 75 days prior to the meeting; provided, however, that in the event that less than 65 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 15th day following the day on which such notice of the date of the Annual Meeting was mailed or such public disclosure was made, whichever first occurs. A stockholder's notice to the Secretary shall set forth as to each matter the stockholder proposes to bring before the Annual Meeting (i) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (ii) the name and record address of the stockholder proposing such business, (iii) the class and number of shares of the corporation which are beneficially owned by the stockholder, and (iv) any material interest of the stockholder in such business.

Notwithstanding anything in these By-Laws to the contrary, no business shall be transacted at the Annual Meeting except in accordance with the procedures set forth in this Section, provided, however, that nothing in this Section shall be deemed to preclude discussion by any stockholder of any business properly brought before the Annual Meeting.

The Chairman of the Annual Meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting in accordance with the provisions of this Section, and if he should so determine, he shall so declare to the meeting and any such business not properly brought before the meeting shall not be transacted.

SPECIAL MEETING

Section 3. Subject to the rights of the holders of any series of preferred stock, par value \$.01 per share, of the corporation (the "Preferred Stock") to elect additional directors under specified circumstances, special

meetings of the stockholders shall be called by the Board. The business transacted at a special meeting shall be confined to the purposes specified in the notice thereof. Special meetings shall be held at such date and at such time as the Board may designate.

NOTICE OF MEETING

Section 4. Written notice of each meeting of stockholders, stating the place, date and hour of the meeting, and the purpose or purposes thereof, shall be mailed not less than ten nor more than sixty days before the date of such meeting to each stockholder entitled to vote thereat.

QUORUM

Section 5. Unless otherwise provided by statute, the holders of shares of stock entitled to cast a majority of votes at a meeting, present either in person or by proxy, shall constitute a quorum at such meeting. The Secretary of the corporation or in his absence an Assistant Secretary or an appointee of the presiding officer of the meeting, shall act as the Secretary of the meeting.

VOTING

Section 6. Except as otherwise provided by law or the Restated Certificate of Incorporation, each stockholder entitled to vote at any meeting shall be entitled to one vote, in person or by written proxy, for each share held of record on the record date fixed as provided in Section 4 of Article V of these By-Laws for determining the stockholders entitled to vote at such meeting. Except as otherwise provided by law, the Restated Certificate of Incorporation or these By-Laws, the vote of a majority of any quorum shall be sufficient to elect directors and to pass any resolution within the power of the holders of all the outstanding shares.

Elections of directors need not be by written ballot; provided, however, that by resolution duly adopted, a vote by written ballot may be required.

PROXIES

Section 7. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for him by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing an instrument revoking the proxy or by delivering a proxy in accordance with applicable law bearing a later date to the Secretary of the corporation. In order to be exercised at a meeting of stockholders, proxies shall be delivered to the Secretary of the corporation or his representative at or before the time of such meeting.

INSPECTORS

Section 8. At each meeting of the stockholders the polls shall be opened and closed; the proxies and ballots shall be received and be taken in charge, and all questions touching the qualification of voters and the validity of proxies and the acceptance or rejection of votes shall be decided by three Inspectors, two of whom shall have power to make a decision. Such Inspectors shall be appointed by the Board before the meeting, or in default thereof by the presiding officer at the meeting, and shall be sworn to the faithful performance of their duties. If

any of the Inspectors previously appointed shall fail to attend or refuse or be unable to serve, substitutes shall be appointed by the presiding officer.

CONDUCT OF MEETINGS

Section 9. The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting by the chairman of the meeting. The Board may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board, the chairman of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board or prescribed by the chairman of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the corporation, their duly authorized and constituted proxies or such other persons as the chairman of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the Board or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

ARTICLE II BOARD OF DIRECTORS

NUMBER; METHOD OF ELECTION; TERMS OF OFFICE AND QUALIFICATION

Section 1. The business and affairs of the corporation shall be managed under the direction of the Board. The number of directors which shall constitute the entire Board shall not be less than eight nor more than sixteen and shall be determined from time to time by resolution adopted by a majority of the entire Board.

Nominations of persons for election to the Board of the corporation at the Annual Meeting of Stockholders may be made at a meeting of stockholders by or at the direction of the Board of Directors by any nominating committee or person appointed by the Board or by any stockholder of the corporation entitled to vote for the election of directors at the meeting who complies with the notice procedures set forth in this Article II. Such nominations, other than those made by or at the direction of the Board, shall be made pursuant to timely notice in writing to the Secretary of the corporation. To be timely, a stockholder's notice shall be delivered to or mailed and received at the principal executive offices of the corporation not less than 50 days nor more than 75 days prior to the meeting; provided, however, that in the event that less than 65 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 15th day following the day on which such notice of the date of the meeting was mailed or such public disclosure was made, whichever first occurs. Such stockholder's notice to the Secretary shall set forth (a) as to each person whom the stockholder proposes to nominate for election or reelection as a director, (i) the name, age, business address and residence of the person, (ii) the principal occupation or employment of the person, (iii) the class and number of shares of capital stock of the corporation which are beneficially owned by the person and (iv) any other information relating to the person that is required to be disclosed in solicitations for proxies for election of directors pursuant to Rule 14A under the Securities Exchange Act of 1934 as amended; and (b) as to the stockholder giving the notice (i) the name and record address of the stockholder and (ii) the class and number of shares of capital stock of the corporation which are beneficially owned by the stockholder. The corporation may require any proposed nominee to furnish such other information as may reasonably be required by the corporation to determine the eligibility of such proposed

nominee to serve as director of the corporation. No person shall be eligible for election as a director of the corporation at the Annual Meeting of Stockholders unless nominated in accordance with the procedures set forth herein. The Chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the foregoing procedure, and if he should so determine, he shall so declare to the meeting and the defective nomination shall be disregarded.

Any director may resign his office at any time by delivering his resignation in writing to the corporation, and the acceptance of such resignation unless required by the terms thereof shall not be necessary to make such resignation effective.

No person who shall have attained the age of 72 shall be eligible for election or reelection, as the case may be, as a director of the corporation.

MEETINGS

Section 2. The Board may hold its meetings and have an office in such place or places within or without the State of Delaware as the Board by resolution from time to time may determine.

The Board may in its discretion provide for regular or stated meetings of the Board. Notice of regular or stated meetings need not be given. Special meetings of the Board shall be held whenever called by direction of the Chief Executive Officer, the President or any two of the directors.

Notice of any special meeting shall be given by the Secretary to each director either by mail or by telegram, facsimile, telephone or other electronic communication or transmission. If mailed, such notice shall be deemed adequately delivered when deposited in the United States mails so addressed, with postage thereon prepaid, at least three days before such meeting. If by telegram, such notice shall be deemed adequately delivered when the telegram is delivered to the telegraph corporation at least twenty-four hours before such meeting. If by facsimile, telephone or other electronic communication or transmission, such notice shall be transmitted at least twenty-four hours before such meeting. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

Except as otherwise provided by applicable law, at any meeting at which every director shall be present, even though without notice, any business may be transacted. No notice of any adjourned meeting need be given.

The Board shall meet immediately after election, following the Annual Meeting of Stockholders, for the purpose of organizing, for the election of corporate officers as hereinafter specified, and for the transaction of any other business which may come before it. No notice of such meeting shall be necessary.

QUORUM

Section 3. Except as otherwise expressly required by these By-Laws or by statute, a majority of the directors then in office (but not less than one-third of the total number of directors constituting the entire Board) shall be present at any meeting of the Board in order to constitute a quorum for the transaction of business at such meeting, and the vote of a majority of the directors present at any such meeting at which quorum is present shall be necessary for the passage of any resolution or for an act to be the act of the Board. In the absence of a quorum, a majority of the directors present may adjourn such meeting from time to time until a quorum shall be present. Notice of any adjourned meeting need not be given.

COMPENSATION OF BOARD OF DIRECTORS

Section 4. Each director (other than a director who is a salaried officer of the corporation or of any subsidiary of the corporation), in consideration of his serving as such, shall be entitled to receive from the corporation such amount per annum and such fees for attendance at meetings of the Board or of any committee of the Board (a "Committee"), or both, as the Board shall from time to time determine. The Board may likewise provide that the corporation shall reimburse each director or member of a Committee for any expenses incurred by him on account of his attendance at any such meeting. Nothing contained in this Section shall be construed to preclude any director from serving the corporation in any other capacity and receiving compensation therefor.

ARTICLE III COMMITTEES OF THE BOARD COMMITTEES

Section 1. The Board shall elect from the directors an Executive Committee, an Audit Committee, a Compensation Committee and any other Committee which the Board may by resolution prescribe. Any such other Committee shall be comprised of such persons and shall possess such authority as shall be set forth in such resolution.

PROCEDURE

Section 2. (1) Each Committee shall fix its own rules of procedure and shall meet where and as provided by such rules. Unless otherwise stated in these By-Laws, a majority of a Committee shall constitute a quorum.

(2) In the absence or disqualification of a member of any Committee, the members of such Committee present at any meeting, and not disqualified from voting, whether or not they constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Fees in connection with such appointments shall be established by the Board.

REPORTS TO THE BOARD

Section 3. All completed actions by the Executive, Audit and Compensation Committees shall be reported to the Board at the next succeeding Board meeting and shall be subject to revision or alteration by the Board, provided, that no acts or rights of third parties shall be affected by any such revision or alteration.

EXECUTIVE COMMITTEE

Section 4. The Board shall elect an Executive Committee comprised of the Chief Executive Officer and not less than four additional members of the Board. During the interval between the meetings of the Board, the Executive Committee shall possess and may exercise all the powers of the Board in the management and direction of all the business and affairs of the corporation (except the matters hereinafter assigned to the Compensation Committee) including, without limitation, the power and authority to declare dividends and to authorize the issuance of stock, in such manner as the Executive Committee shall deem best for the interests of the corporation in all cases in which specific directions shall not have been given by the Board.

COMPENSATION COMMITTEE

Section 5. The Board shall elect a Compensation Committee consisting of at least four members of the Board, none of whom shall be officers or employees of the corporation or of any subsidiary corporation. The

Board shall appoint a chairman of such Committee who shall be one of its members. The Compensation Committee shall have such authority and duties as the Board by resolution shall prescribe.

AUDIT COMMITTEE

Section 6. The Board shall elect from among its members an Audit Committee consisting of at least three members. The Board shall appoint a chairman of said Committee who shall be one of its members. The Audit Committee shall have such authority and duties as the Board by resolution shall prescribe. In no event shall a director who is also an officer or employee of the corporation or any of its subsidiary companies serve as a member of such Committee. The Chief Executive Officer shall have the right to attend (but not vote at) each meeting of such Committee.

NOMINATING AND MANAGEMENT DEVELOPMENT COMMITTEE

Section 7. The Board shall elect from among its members a Nominating and Management Development Committee consisting of at least three members. The Board shall appoint a chairman of said Committee who shall be one of its members. The Nominating and Management Development Committee shall have such authority and duties as the Board by resolution shall prescribe. In no event shall a director who is also an officer or employee of the corporation or any of its subsidiary companies serve as a member of such Committee. The Chief Executive Officer shall have the right to attend (but not vote at) each meeting of such Committee.

ARTICLE IV OFFICERS

GENERAL PROVISIONS

Section 1. The corporate officers of the corporation shall consist of the following: a Chairman and/or a President, one of whom shall be designated Chief Executive Officer and each of whom shall be chosen from the Board; one or more Vice Chairman, Executive Vice Presidents, Senior Vice Presidents, Vice Presidents and Assistant Vice Presidents; a General Counsel, a Secretary, one or more Assistant Secretaries, a Treasurer, one or more Assistant Treasurers, a Controller, and such other officers as the Board may from time to time designate. Insofar as permitted by statute, the same person may hold two or more offices. All officers chosen by the Board shall each have such powers and duties as generally pertain to their respective offices, subject to the specific provisions of this Article IV.

The Chairman and/or President, each Vice Chairman, Executive Vice President, Senior Vice President and Vice President, the Secretary and the Treasurer shall be elected by the Board. Each such officer shall hold office until his successor is elected or appointed and qualified or until his earlier death, resignation or removal.

Any officer may be removed, with or without cause, at any time by the Board.

A vacancy in any office may be filled for the unexpired portion of the term in the same manner as provided in these By-Laws for election or appointment to such office.

POWERS AND DUTIES OF THE CHIEF EXECUTIVE OFFICER

Section 2. The Chief Executive Officer shall have general charge and management of the affairs, property and business of the corporation, subject to the Board, the Executive Committee and the provisions of these By-Laws. The Chief Executive Officer or in his absence such other individual as the Board may select, shall preside at all meetings of the stockholders. He shall also preside at meetings of the Board and the Executive Committee,

and in his absence the Board or the Executive Committee, as the case may be, shall appoint one of their number to preside.

The Chief Executive Officer shall perform all duties assigned to him in these By-Laws and such other duties as may from time to time be assigned to him by the Board. He shall have the power to appoint and remove, with or without cause, such officers, other than those elected by the Board as provided for in these By-Laws, as in his judgment may be necessary or proper for the transaction of the business of the corporation, and shall determine their duties, all subject to ratification by the Board.

POWERS AND DUTIES OF OTHER OFFICERS

Section 3. The Chairman shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 4. Each Vice Chairman shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 5. The President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 6. Each Executive Vice President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 7. Each Senior Vice President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 8. Each Vice President and Assistant Vice President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee, the Chief Executive Officer or an Executive Vice President.

Section 9. The General Counsel shall have general supervision and control of all of the corporation's legal business. He shall perform such other duties as may be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 10. The Secretary or an Assistant Secretary shall record the proceedings of all meetings of the Board, the Executive Committee of the Board and the stockholders, in books kept for that purpose. The Secretary shall be the custodian of the corporate seal, and he or an Assistant Secretary shall affix the same to and countersign papers requiring such acts; and he and the Assistant Secretaries shall perform such other duties as may be required by the Board, the Executive Committee or the Chief Executive Officer.

Section 11. The Treasurer and Assistant Treasurers shall have care and custody of all funds of the corporation and disburse and administer the same under the direction of the Board, the Executive Committee or the Chief Executive Officer and shall perform such other duties as the Board, the Executive Committee or the Chief Executive Officer shall assign to them.

Section 12. The Controller shall maintain adequate records of all assets, liabilities and transactions of the corporation and see that audits thereof are currently and regularly made; and he shall perform such other duties as may be required by the Board, the Executive Committee or the Chief Executive Officer.

SALARIES AND APPOINTMENTS

Section 13. The salaries of corporate officers shall be fixed by the Compensation Committee provided for in Section 5 of Article III hereof, except that the fixing of salaries below certain levels, determinable from time to time by the Compensation Committee, may in the discretion of the Committee be delegated to the Chief Executive Officer, subject to the approval of the Board.

INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 14. (1) The corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "Indemnitee") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, including appeals (a "proceeding"), by reason of the fact that he, or a person for whom he is the legal representative, is or was a director or officer of the corporation or, while a director or officer of the corporation, is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnitee. Notwithstanding the preceding sentence, except as otherwise provided in paragraph (3) of this Section 14, the corporation shall be required to indemnify an Indemnitee in connection with a proceeding (or part thereof) commenced by such Indemnitee only if the commencement of such proceeding (or part thereof) by the Indemnitee was authorized by the Board.

(2) The corporation shall pay the expenses (including attorneys' fees) incurred by an Indemnitee in defending any proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the proceeding shall be made only upon receipt of an undertaking by the Indemnitee to repay all amounts advanced if it should be ultimately determined that the Indemnitee is not entitled to be indemnified under this Section 14 or otherwise.

(3) If a claim for indemnification or payment of expenses under this Section 14 is not paid in full within thirty days after a written claim therefor by the Indemnitee has been received by the corporation, the Indemnitee may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the corporation shall have the burden of proving that the Indemnitee is not entitled to the requested indemnification or payment of expenses under applicable law.

(4) The rights conferred on any Indemnitee by this Section 14 shall not be exclusive of any other rights which such Indemnitee may have or hereafter acquire under any statute, provision of the Restated Certificate of Incorporation, these By-Laws, agreement, vote of stockholders or disinterested directors or otherwise.

(5) The corporation's obligation, if any, to indemnify or to advance expenses to any Indemnitee who was or is serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, enterprise or nonprofit entity shall be reduced by any amount such Indemnitee may collect as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, enterprise or nonprofit enterprise.

(6) Any repeal or modification of the foregoing provisions of this Section 14 shall not adversely affect any right or protection hereunder of any Indemnitee in respect of any act or omission occurring prior to the time of such repeal or modification.

(7) This Section 14 shall not limit the right of the corporation, to the extent and in the manner permitted by law, to indemnify and to advance expenses to persons other than Indemnities when and as authorized by appropriate corporate action.

ARTICLE V
CAPITAL STOCK
CERTIFICATES OF STOCK

Section 1. Certificates of stock certifying the number of shares owned shall be issued to each stockholder in such form not inconsistent with the Restated Certificate of Incorporation as shall be approved by the Board. Such certificates of stock shall be numbered and registered in the order in which they are issued and shall be signed by the Chairman, the President or a Vice President, and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary. Any and all the signatures on the certificates may be a facsimile.

TRANSFER OF SHARES

Section 2. Transfers of shares shall be made only upon the books of the corporation by the holder, in person, or by power of attorney duly executed and filed with the Secretary of the corporation, and on the surrender of the certificate or certificates of such shares, properly assigned. The corporation may, if and whenever the Board shall so determine, maintain one or more offices or agencies, each in charge of an agent designated by the Board, where the shares of the capital stock of the corporation shall be transferred and/or registered. The Board may also make such additional rules and regulations as it may deem expedient concerning the issue, transfer and registration of certificates for shares of the capital stock of the corporation.

LOST, STOLEN OR DESTROYED CERTIFICATES

Section 3. The corporation may issue a new certificate of capital stock of the corporation in place of any certificate theretofore issued by the corporation, alleged to have been lost, stolen or destroyed, and the corporation may, but shall not be obligated to, require the owner of the alleged lost, stolen or destroyed certificate, or his legal representatives, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate, as the officers of the corporation may, in their discretion, require.

FIXING OF RECORD DATE

Section 4. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which record date: (1) in the case of determination of stockholders entitled to vote at any meeting of stockholders or adjournment thereof, shall, unless otherwise required by law, not be more than sixty nor less than ten days before the date of such meeting; (2) in the case of determination of stockholders entitled to express consent to corporate action in writing without a meeting, shall not be more than ten days from the date upon which the resolution fixing the record date is adopted by the Board; and (3) in the case of any other action, shall not be more than sixty days prior to such other action. If no record date is fixed by the Board: (1) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; (2) the record date for determining stockholders entitled to express consent to corporate action in writing without a meeting shall be determined in accordance with Article VI of these By-Laws; and (3) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto. A determination of stockholders of record entitled to

notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for the adjourned meeting.

ARTICLE VI CONSENTS TO CORPORATE ACTION RECORD DATE

Section 1. The record date for determining stockholders entitled to express consent to corporate action in writing without a meeting shall be as fixed by the Board or as otherwise established under this Section. Any person seeking to have the stockholders authorize or take corporate action by written consent without a meeting shall by written notice addressed to the Secretary and delivered to the corporation, request that a record date be fixed for such purpose. The Board may fix a record date for such purpose which shall be no more than 10 days after the date upon which the resolution fixing the record date is adopted by the Board and shall not precede the date such resolution is adopted. If the Board fails within 10 days after the corporation receives such notice to fix a record date for such purpose, the record date shall be the day on which the first written consent is delivered to the corporation in the manner described in Section 2 below unless prior action by the Board is required under the General Corporation Law of Delaware, in which event the record date shall be at the close of business on the day on which the Board adopts the resolution taking such prior action.

PROCEDURES

Section 2. Every written consent purporting to take or authorizing the taking of corporate action and/or related revocations (each such written consent and related revocation is referred to in this Article VI as a "Consent") shall bear the date of signature of each stockholder who signs the Consent, and no Consent shall be effective to take the corporate action referred to therein unless, within 60 days of the earliest dated Consent delivered in the manner required by this Section 2, Consents signed by a sufficient number of stockholders to take such action are delivered to the corporation.

A Consent shall be delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business, or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery to the corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested.

In the event of the delivery to the corporation of a Consent, the Secretary of the corporation shall provide for the safe-keeping of such Consent and shall promptly conduct such ministerial review of the sufficiency of the Consents and of the validity of the action to be taken by shareholder consent as he deems necessary or appropriate, including, without limitation, whether the holders of a number of shares having the requisite voting power to authorize or take the action specified in the Consent have given consent; provided, however, that if the corporate action to which the Consent relates is the removal or replacement of one or more members of the Board, the Secretary of the corporation shall promptly designate two persons, who shall not be members of the Board, to serve as Inspectors with respect to such Consent and such Inspectors shall discharge the functions of the Secretary of the corporation under this Section 2. If after such investigation the Secretary or the Inspectors (as the case may be) shall determine that the Consent is valid and that the action therein specified has been validly authorized, that fact shall forthwith be certified on the records of the corporation kept for the purpose of recording the proceedings of meetings of stockholders, and the Consent shall be filed in such records, at which time the Consent shall become effective as stockholder action. In conducting the investigation required by this Section 2, the Secretary or the Inspectors (as the case may be) may, at the expense of the corporation, retain special legal counsel and any other necessary or appropriate professional advisors, and such other personnel as they may deem necessary or appropriate to assist them, and shall be fully protected in relying in good faith upon the opinion of such counsel or advisors.

**ARTICLE VII
MISCELLANEOUS
DIVIDENDS AND RESERVES**

Section 1. Dividends upon the capital stock of the corporation may be declared as permitted by law by the Board or the Executive Committee at any regular or special meeting. Before payment of any dividend or making any distribution of profits, there may be set aside out of the surplus or net profits of the corporation such sum or sums as the Board or the Executive Committee, from time to time, in their absolute discretion, think proper as a reserve fund to meet contingencies, or for such other purposes as the Board or Executive Committee shall think conducive to the interests of the corporation, and any reserve so established may be abolished and restored to the surplus account by like action of the Board or the Executive Committee.

SEAL

Section 2. The seal of the corporation shall bear the corporate name of the corporation, the year of its incorporation and the words "Corporate Seal, Delaware".

WAIVER

Section 3. Whenever any notice whatever is required to be given by statute or under the provisions of the Restated Certificate of Incorporation or these By-Laws, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent thereto. Neither the business to be transacted at, nor the purpose of, any annual or special meeting of the stockholders or the Board, as the case may be, need be specified in any waiver of notice of such meeting.

FISCAL YEAR

Section 4. The fiscal year of the corporation shall begin with January first and end with December thirty-first.

CONTRACTS

Section 5. Except as otherwise required by law, the Restated Certificate of Incorporation or these By-Laws, any contracts or other instruments may be executed and delivered in the name and on the behalf of the corporation by such officer or officers of the corporation as the Board may from time to time direct. Such authority may be general or confined to specific instances as the Board may determine. The Chairman of the Board, the President or any Vice President may execute bonds, contracts, deeds, leases and other instruments to be made or executed for or on behalf of the corporation. Subject to any restrictions imposed by the Board, the Chairman of the Board, the President or any Vice President of the corporation may delegate contractual powers to others under his jurisdiction, it being understood, however, that any such delegation of power shall not relieve such officer of responsibility with respect to the exercise of such delegated power.

PROXIES

Section 6. Unless otherwise provided by resolution adopted by the Board, the Chairman of the Board, the President or any Vice President may from time to time appoint an attorney or attorneys or agent or agents of the corporation, in the name and on behalf of the corporation, to cast the votes which the corporation may be entitled to cast as the holder of stock or other securities in any other corporation or other entity, any of whose stock or

other securities may be held by the corporation, at meetings of the holders of the stock or other securities of such other corporation or other entity, or to consent in writing, in the name of the corporation as such holder, to any action by such other corporation or other entity, and may instruct the person or persons so appointed as to the manner of casting such votes or giving such consent, and may execute or cause to be executed in the name and on behalf of the corporation and under its corporate seal or otherwise, all such written proxies or other instruments as he may deem necessary or proper in the premises.

AMENDMENTS

Section 7. The Board from time to time shall have the power to make, alter, amend or repeal any and all of these By-Laws, but any By-Laws so made, altered or repealed by the Board may be amended, altered or repealed by the stockholders.

CERTIFICATION

The undersigned hereby certifies that he is the duly elected and acting Secretary of New Tenneco Inc., a Delaware corporation, and the keeper of its corporate records and minutes. The undersigned further hereby certifies that the above and foregoing is a true and correct copy of the By-Laws of said corporation, as in force at the date hereof.

WITNESS the hand of the undersigned and the seal of said corporation, this day of , 19 .

Secretary

**BY-LAWS
OF
NEWPORT NEWS SHIPBUILDING INC.
AMENDED AND RESTATED AS OF , 1996**

**ARTICLE I
PLACE OF STOCKHOLDER MEETINGS**

Section 1. All meetings of the stockholders of the corporation shall be held at such place or places, within or without the State of Delaware, as may from time to time be fixed by the Board of Directors of the corporation (the "Board"), or as shall be specified or fixed in the respective notices or waivers of notice thereof.

ANNUAL MEETING

Section 2. The Annual Meeting of Stockholders shall be held on such date and at such time as may be fixed by the Board and stated in the notice thereof, for the purpose of electing directors and for the transaction of only such other business as is properly brought before the meeting in accordance with these By-Laws.

To be properly brought before the meeting, business must be either (a) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board, (b) otherwise properly brought before the meeting by or at the direction of the Board, or (c) otherwise properly brought before the meeting by a stockholder. In addition to any other applicable requirements, for business to be properly brought before the Annual Meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the Secretary of the corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation, not less than 50 days nor more than 75 days prior to the meeting; provided, however, that in the event that less than 65 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 15th day following the day on which such notice of the date of the Annual Meeting was mailed or such public disclosure was made, whichever first occurs. A stockholder's notice to the Secretary shall set forth as to each matter the stockholder proposes to bring before the Annual Meeting (i) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (ii) the name and record address of the stockholder proposing such business, (iii) the class and number of shares of the corporation which are beneficially owned by the stockholder, and (iv) any material interest of the stockholder in such business.

Notwithstanding anything in these By-Laws to the contrary, no business shall be transacted at the Annual Meeting except in accordance with the procedures set forth in this Section, provided, however, that nothing in this Section shall be deemed to preclude discussion by any stockholder of any business properly brought before the Annual Meeting.

The Chairman of the Annual Meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting in accordance with the provisions of this Section, and if he should so determine, he shall so declare to the meeting and any such business not properly brought before the meeting shall not be transacted.

SPECIAL MEETING

Section 3. Subject to the rights of the holders of any series of preferred stock, par value \$.01 per share, of the corporation (the "Preferred Stock") to elect additional directors under specified circumstances, special meetings of the stockholders shall be called by the Board. The business transacted at a special meeting shall be confined to the purposes specified in the notice thereof. Special meetings shall be held at such date and at such time as the Board may designate.

NOTICE OF MEETING

Section 4. Written notice of each meeting of stockholders, stating the place, date and hour of the meeting, and the purpose or purposes thereof, shall be mailed not less than ten nor more than sixty days before the date of such meeting to each stockholder entitled to vote thereat.

QUORUM

Section 5. Unless otherwise provided by statute, the holders of shares of stock entitled to cast a majority of votes at a meeting, present either in person or by proxy, shall constitute a quorum at such meeting. The Secretary of the corporation or in his absence an Assistant Secretary or an appointee of the presiding officer of the meeting, shall act as the Secretary of the meeting.

VOTING

Section 6. Except as otherwise provided by law or the Restated Certificate of Incorporation, each stockholder entitled to vote at any meeting shall be entitled to one vote, in person or by written proxy, for each share held of record on the record date fixed as provided in Section 4 of Article V of these By-Laws for determining the stockholders entitled to vote at such meeting. Except as otherwise provided by law, the Restated Certificate of Incorporation or these By-Laws, the vote of a majority of any quorum shall be sufficient to elect directors and to pass any resolution within the power of the holders of all the outstanding shares.

Elections of directors need not be by written ballot; provided, however, that by resolution duly adopted, a vote by written ballot may be required.

PROXIES

Section 7. Each stockholder entitled to vote at a meeting of stockholders or to express consent or dissent to corporate action in writing without a meeting may authorize another person or persons to act for him by proxy, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. A proxy shall be irrevocable if it states that it is irrevocable and if, and only as long as, it is coupled with an interest sufficient in law to support an irrevocable power. A stockholder may revoke any proxy which is not irrevocable by attending the meeting and voting in person or by filing an instrument revoking the proxy or by delivering a proxy in accordance with applicable law bearing a later date to the Secretary of the corporation. In order to be exercised at a meeting of stockholders, proxies shall be delivered to the Secretary of the corporation or his representative at or before the time of such meeting.

INSPECTORS

Section 8. At each meeting of the stockholders the polls shall be opened and closed; the proxies and ballots shall be received and be taken in charge, and all questions touching the qualification of voters and the validity of proxies and the acceptance or rejection of votes shall be decided by three Inspectors, two of whom shall have power to make a decision. Such Inspectors shall be appointed by the Board before the meeting, or in default thereof by the presiding officer at the meeting, and shall be sworn to the faithful performance of their duties. If any of the Inspectors previously appointed shall fail to attend or refuse or be unable to serve, substitutes shall be appointed by the presiding officer.

CONDUCT OF MEETINGS

Section 9. The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting by the chairman of the meeting. The Board may adopt by resolution such rules and regulations for the conduct of the meeting of stockholders as it shall deem appropriate. Except to the extent inconsistent with such rules and regulations as adopted by the Board, the chairman of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board or prescribed by the chairman of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the corporation, their duly authorized and constituted proxies or such other persons as the chairman of the meeting shall determine; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the Board or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

ARTICLE II BOARD OF DIRECTORS

NUMBER; METHOD OF ELECTION; TERMS OF OFFICE AND QUALIFICATION

Section 1. The business and affairs of the corporation shall be managed under the direction of the Board. The number of directors which shall constitute the entire Board shall not be less than three nor more than sixteen and shall be determined from time to time by resolution adopted by a majority of the entire Board.

Nominations of persons for election to the Board of the corporation at the Annual Meeting of Stockholders may be made at a meeting of stockholders by or at the direction of the Board of Directors by any nominating committee or person appointed by the Board or by any stockholder of the corporation entitled to vote for the election of directors at the meeting who complies with the notice procedures set forth in this Article II. Such nominations, other than those made by or at the direction of the Board, shall be made pursuant to timely notice in writing to the Secretary of the corporation. To be timely, a stockholder's notice shall be delivered to or mailed and received at the principal executive offices of the corporation not less than 50 days nor more than 75 days prior to the meeting; provided, however, that in the event that less than 65 days' notice or prior public disclosure of the date of the meeting is given or made to stockholders, notice by the stockholder to be timely must be so received not later than the close of business on the 15th day following the day on which such notice of the date of the meeting was mailed or such public disclosure was made, whichever first occurs. Such stockholder's notice to the Secretary shall set forth (a) as to each person whom the stockholder proposes to nominate for election or reelection as a director, (i) the name, age, business address and residence of the person, (ii) the principal occupation or employment of the person, (iii) the class and number of shares of capital stock of the corporation which are beneficially owned by the person and (iv) any other information relating to the person that is required to be disclosed in solicitations for proxies for election of directors pursuant to Rule 14A under the Securities Exchange Act of 1934 as amended; and (b) as to the stockholder giving the notice (i) the name and record address of the stockholder and (ii) the class and number of shares of capital stock of the corporation which are beneficially owned by the stockholder. The corporation may require any proposed nominee to furnish such other information as may reasonably be required by the corporation to determine the eligibility of such proposed nominee to serve as director of the corporation. No person shall be eligible for election as a director of the corporation at the Annual Meeting of Stockholders unless nominated in accordance with the procedures set forth herein. The Chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that a nomination was not made in accordance with the foregoing procedure, and if he should so determine, he shall so declare to the meeting and the defective nomination shall be disregarded.

Any director may resign his office at any time by delivering his resignation in writing to the corporation, and the acceptance of such resignation unless required by the terms thereof shall not be necessary to make such resignation effective.

No person who shall have attained the age of 72 shall be eligible for election or reelection, as the case may be, as a director of the corporation, except that the foregoing qualification shall not apply to any director who, at the time of the adoption of these By-Laws, is then in office and has attained such age.

MEETINGS

Section 2. The Board may hold its meetings and have an office in such place or places within or without the State of Delaware as the Board by resolution from time to time may determine.

The Board may in its discretion provide for regular or stated meetings of the Board. Notice of regular or stated meetings need not be given. Special meetings of the Board shall be held whenever called by direction of the Chief Executive Officer, the President or any two of the directors.

Notice of any special meeting shall be given by the Secretary to each director either by mail or by telegram, facsimile, telephone or other electronic communication or transmission. If mailed, such notice shall be deemed adequately delivered when deposited in the United States mails so addressed, with postage thereon prepaid, at least three days before such meeting. If by telegram, such notice shall be deemed adequately delivered when the telegram is delivered to the telegraph corporation at least twenty-four hours before such meeting. If by facsimile, telephone or other electronic communication or transmission, such notice shall be transmitted at least twenty-four hours before such meeting. Unless otherwise indicated in the notice thereof, any and all business may be transacted at a special meeting.

Except as otherwise provided by applicable law, at any meeting at which every director shall be present, even though without notice, any business may be transacted. No notice of any adjourned meeting need be given.

The Board shall meet immediately after election, following the Annual Meeting of Stockholders, for the purpose of organizing, for the election of corporate officers as hereinafter specified, and for the transaction of any other business which may come before it. No notice of such meeting shall be necessary.

QUORUM

Section 3. Except as otherwise expressly required by these By-Laws or by statute, a majority of the directors then in office (but not less than one-third of the total number of directors constituting the entire Board) shall be present at any meeting of the Board in order to constitute a quorum for the transaction of business at such meeting, and the vote of a majority of the directors present at any such meeting at which quorum is present shall be necessary for the passage of any resolution or for an act to be the act of the Board. In the absence of a quorum, a majority of the directors present may adjourn such meeting from time to time until a quorum shall be present. Notice of any adjourned meeting need not be given.

COMPENSATION OF BOARD OF DIRECTORS

Section 4. Each director (other than a director who is a salaried officer of the corporation or of any subsidiary of the corporation), in consideration of his serving as such, shall be entitled to receive from the corporation such amount per annum and such fees for attendance at meetings of the Board or of any committee of the Board (a "Committee"), or both, as the Board shall from time to time determine. The Board may likewise provide that the corporation shall reimburse each director or member of a Committee for any expenses incurred by him on account of his attendance at any such meeting. Nothing contained in this Section shall be construed to preclude any director from serving the corporation in any other capacity and receiving compensation therefor.

ARTICLE III COMMITTEES OF THE BOARD COMMITTEES

Section 1. The Board shall elect from the directors an Executive Committee, an Audit Committee, a Compensation Committee and any other Committee which the Board may by resolution prescribe. Any such other Committee shall be comprised of such persons and shall possess such authority as shall be set forth in such resolution.

PROCEDURE

Section 2. (1) Each Committee shall fix its own rules of procedure and shall meet where and as provided by such rules. Unless otherwise stated in these By-Laws, a majority of a Committee shall constitute a quorum.

(2) In the absence or disqualification of a member of any Committee, the members of such Committee present at any meeting, and not disqualified from voting, whether or not they constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member. Fees in connection with such appointments shall be established by the Board.

REPORTS TO THE BOARD

Section 3. All completed actions by the Executive, Audit and Compensation Committees shall be reported to the Board at the next succeeding Board meeting and shall be subject to revision or alteration by the Board, provided, that no acts or rights of third parties shall be affected by any such revision or alteration.

EXECUTIVE COMMITTEE

Section 4. The Board shall elect an Executive Committee comprised of the Chief Executive Officer and not less than four additional members of the Board. During the interval between the meetings of the Board, the Executive Committee shall possess and may exercise all the powers of the Board in the management and direction of all the business and affairs of the corporation (except the matters hereinafter assigned to the Compensation Committee) including, without limitation, the power and authority to declare dividends and to authorize the issuance of stock, in such manner as the Executive Committee shall deem best for the interests of the corporation in all cases in which specific directions shall not have been given by the Board.

COMPENSATION COMMITTEE

Section 5. The Board shall elect a Compensation Committee consisting of at least four members of the Board, none of whom shall be officers or employees of the corporation or of any subsidiary corporation. The Board shall appoint a chairman of such Committee who shall be one of its members. The Compensation Committee shall have such authority and duties as the Board by resolution shall prescribe.

AUDIT COMMITTEE

Section 6. The Board shall elect from among its members an Audit Committee consisting of at least three members. The Board shall appoint a chairman of said Committee who shall be one of its members. The Audit Committee shall have such authority and duties as the Board by resolution shall prescribe. In no event shall a director who is also an officer or employee of the corporation or any of its subsidiary companies serve as a member of such Committee. The Chief Executive Officer shall have the right to attend (but not vote at) each meeting of such Committee.

NOMINATING AND MANAGEMENT DEVELOPMENT COMMITTEE

Section 7. The Board shall elect from among its members a Nominating and Management Development Committee consisting of at least three members. The Board shall appoint a chairman of said Committee who shall be one of its members. The Nominating and Management Development Committee shall have such authority and duties as the Board by resolution shall prescribe. In no event shall a director who is also an officer or employee of the corporation or any of its subsidiary companies serve as a member of such Committee. The Chief Executive Officer shall have the right to attend (but not vote at) each meeting of such Committee.

ARTICLE IV OFFICERS GENERAL PROVISIONS

Section 1. The corporate officers of the corporation shall consist of the following: a Chairman and/or a President, one of whom shall be designated Chief Executive Officer and each of whom shall be chosen from the Board; one or more Vice Chairman, Executive Vice Presidents, Senior Vice Presidents, Vice Presidents and Assistant Vice Presidents; a General Counsel, a Secretary, one or more Assistant Secretaries, a Treasurer, one or more Assistant Treasurers, a Controller, and such other officers as the Board may from time to time designate. Insofar as permitted by statute, the same person may hold two or more offices. All officers chosen by the Board shall each have such powers and duties as generally pertain to their respective offices, subject to the specific provisions of this Article IV.

The Chairman and/or President, each Vice Chairman, Executive Vice President, Senior Vice President and Vice President, the Secretary and the Treasurer shall be elected by the Board. Each such officer shall hold office until his successor is elected or appointed and qualified or until his earlier death, resignation or removal.

Any officer may be removed, with or without cause, at any time by the Board.

A vacancy in any office may be filled for the unexpired portion of the term in the same manner as provided in these By-Laws for election or appointment to such office.

POWERS AND DUTIES OF THE CHIEF EXECUTIVE OFFICER

Section 2. The Chief Executive Officer shall have general charge and management of the affairs, property and business of the corporation, subject to the Board, the Executive Committee and the provisions of these By-Laws. The Chief Executive Officer or in his absence such other individual as the Board may select, shall preside at all meetings of the stockholders. He shall also preside at meetings of the Board and the Executive Committee, and in his absence the Board or the Executive Committee, as the case may be, shall appoint one of their number to preside.

The Chief Executive Officer shall perform all duties assigned to him in these By-Laws and such other duties as may from time to time be assigned to him by the Board. He shall have the power to appoint and remove, with or without cause, such officers, other than those elected by the Board as provided for in these By-Laws, as in his judgment may be necessary or proper for the transaction of the business of the corporation, and shall determine their duties, all subject to ratification by the Board.

POWERS AND DUTIES OF OTHER OFFICERS

Section 3. The Chairman shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 4. Each Vice Chairman shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 5. The President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 6. Each Executive Vice President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 7. Each Senior Vice President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 8. Each Vice President and Assistant Vice President shall perform such duties as may from time to time be assigned to him by the Board, the Executive Committee, the Chief Executive Officer or an Executive Vice President.

Section 9. The General Counsel shall have general supervision and control of all of the corporation's legal business. He shall perform such other duties as may be assigned to him by the Board, the Executive Committee or the Chief Executive Officer.

Section 10. The Secretary or an Assistant Secretary shall record the proceedings of all meetings of the Board, the Executive Committee of the Board and the stockholders, in books kept for that purpose. The Secretary shall be the custodian of the corporate seal, and he or an Assistant Secretary shall affix the same to and countersign papers requiring such acts; and he and the Assistant Secretaries shall perform such other duties as may be required by the Board, the Executive Committee or the Chief Executive Officer.

Section 11. The Treasurer and Assistant Treasurers shall have care and custody of all funds of the corporation and disburse and administer the same under the direction of the Board, the Executive Committee or the Chief Executive Officer and shall perform such other duties as the Board, the Executive Committee or the Chief Executive Officer shall assign to them.

Section 12. The Controller shall maintain adequate records of all assets, liabilities and transactions of the corporation and see that audits thereof are currently and regularly made; and he shall perform such other duties as may be required by the Board, the Executive Committee or the Chief Executive Officer.

SALARIES AND APPOINTMENTS

Section 13. The salaries of corporate officers shall be fixed by the Compensation Committee provided for in Section 5 of Article III hereof, except that the fixing of salaries below certain levels, determinable from time to time by the Compensation Committee, may in the discretion of the Committee be delegated to the Chief Executive Officer, subject to the approval of the Board.

INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 14. (1) The corporation shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "Indemnitee") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, including appeals (a "proceeding"), by reason of the fact that he, or a person for whom he is the legal representative, is or was a director or officer of the corporation or, while a director or officer of the corporation, is or was serving at the request of the corporation as a director, officer,

employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnitee. Notwithstanding the preceding sentence, except as otherwise provided in paragraph (3) of this Section 14, the corporation shall be required to indemnify an Indemnitee in connection with a proceeding (or part thereof) commenced by such Indemnitee only if the commencement of such proceeding (or part thereof) by the Indemnitee was authorized by the Board.

(2) The corporation shall pay the expenses (including attorneys' fees) incurred by an Indemnitee in defending any proceeding in advance of its final disposition, provided, however, that, to the extent required by law, such payment of expenses in advance of the final disposition of the proceeding shall be made only upon receipt of an undertaking by the Indemnitee to repay all amounts advanced if it should be ultimately determined that the Indemnitee is not entitled to be indemnified under this Section 14 or otherwise.

(3) If a claim for indemnification or payment of expenses under this Section 14 is not paid in full within thirty days after a written claim therefor by the Indemnitee has been received by the corporation, the Indemnitee may file suit to recover the unpaid amount of such claim and, if successful in whole or in part, shall be entitled to be paid the expense of prosecuting such claim. In any such action the corporation shall have the burden of proving that the Indemnitee is not entitled to the requested indemnification or payment of expenses under applicable law.

(4) The rights conferred on any Indemnitee by this Section 14 shall not be exclusive of any other rights which such Indemnitee may have or hereafter acquire under any statute, provision of the Restated Certificate of Incorporation, these By-Laws, agreement, vote of stockholders or disinterested directors or otherwise.

(5) The corporation's obligation, if any, to indemnify or to advance expenses to any Indemnitee who was or is serving at its request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, enterprise or nonprofit entity shall be reduced by any amount such Indemnitee may collect as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, enterprise or nonprofit enterprise.

(6) Any repeal or modification of the foregoing provisions of this Section 14 shall not adversely affect any right or protection hereunder of any Indemnitee in respect of any act or omission occurring prior to the time of such repeal or modification.

(7) This Section 14 shall not limit the right of the corporation, to the extent and in the manner permitted by law, to indemnify and to advance expenses to persons other than Indemnitees when and as authorized by appropriate corporate action.

ARTICLE V CAPITAL STOCK CERTIFICATES OF STOCK

Section 1. Certificates of stock certifying the number of shares owned shall be issued to each stockholder in such form not inconsistent with the Restated Certificate of Incorporation as shall be approved by the Board. Such certificates of stock shall be numbered and registered in the order in which they are issued and shall be signed by the Chairman, the President or a Vice President, and by the Treasurer or an Assistant Treasurer or the Secretary or an Assistant Secretary. Any and all the signatures on the certificates may be a facsimile.

TRANSFER OF SHARES

Section 2. Transfers of shares shall be made only upon the books of the corporation by the holder, in person, or by power of attorney duly executed and filed with the Secretary of the corporation, and on the surrender of

the certificate or certificates of such shares, properly assigned. The corporation may, if and whenever the Board shall so determine, maintain one or more offices or agencies, each in charge of an agent designated by the Board, where the shares of the capital stock of the corporation shall be transferred and/or registered. The Board may also make such additional rules and regulations as it may deem expedient concerning the issue, transfer and registration of certificates for shares of the capital stock of the corporation.

LOST, STOLEN OR DESTROYED CERTIFICATES

Section 3. The corporation may issue a new certificate of capital stock of the corporation in place of any certificate theretofore issued by the corporation, alleged to have been lost, stolen or destroyed, and the corporation may, but shall not be obligated to, require the owner of the alleged lost, stolen or destroyed certificate, or his legal representatives, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate, as the officers of the corporation may, in their discretion, require.

FIXING OF RECORD DATE

Section 4. In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which record date: (1) in the case of determination of stockholders entitled to vote at any meeting of stockholders or adjournment thereof, shall, unless otherwise required by law, not be more than sixty nor less than ten days before the date of such meeting; (2) in the case of determination of stockholders entitled to express consent to corporate action in writing without a meeting, shall not be more than ten days from the date upon which the resolution fixing the record date is adopted by the Board; and (3) in the case of any other action, shall not be more than sixty days prior to such other action. If no record date is fixed by the Board: (1) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held; (2) the record date for determining stockholders entitled to express consent to corporate action in writing without a meeting shall be determined in accordance with Article VI of these By-Laws; and (3) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for the adjourned meeting.

ARTICLE VI CONSENTS TO CORPORATE ACTION RECORD DATE

Section 1. The record date for determining stockholders entitled to express consent to corporate action in writing without a meeting shall be as fixed by the Board or as otherwise established under this Section. Any person seeking to have the stockholders authorize or take corporate action by written consent without a meeting shall by written notice addressed to the Secretary and delivered to the corporation, request that a record date be fixed for such purpose. The Board may fix a record date for such purpose which shall be no more than 10 days after the date upon which the resolution fixing the record date is adopted by the Board and shall not precede the date such resolution is adopted. If the Board fails within 10 days after the corporation receives such notice to fix a record date for such purpose, the record date shall be the day on which the first written consent is delivered to

the corporation in the manner described in Section 2 below unless prior action by the Board is required under the General Corporation Law of Delaware, in which event the record date shall be at the close of business on the day on which the Board adopts the resolution taking such prior action.

PROCEDURES

Section 2. Every written consent purporting to take or authorizing the taking of corporate action and/or related revocations (each such written consent and related revocation is referred to in this Article VI as a "Consent") shall bear the date of signature of each stockholder who signs the Consent, and no Consent shall be effective to take the corporate action referred to therein unless, within 60 days of the earliest dated Consent delivered in the manner required by this Section 2, Consents signed by a sufficient number of stockholders to take such action are delivered to the corporation.

A Consent shall be delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business, or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery to the corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested.

In the event of the delivery to the corporation of a Consent, the Secretary of the corporation shall provide for the safe-keeping of such Consent and shall promptly conduct such ministerial review of the sufficiency of the Consents and of the validity of the action to be taken by shareholder consent as he deems necessary or appropriate, including, without limitation, whether the holders of a number of shares having the requisite voting power to authorize or take the action specified in the Consent have given consent; provided, however, that if the corporate action to which the Consent relates is the removal or replacement of one or more members of the Board, the Secretary of the corporation shall promptly designate two persons, who shall not be members of the Board, to serve as Inspectors with respect to such Consent and such Inspectors shall discharge the functions of the Secretary of the corporation under this Section 2. If after such investigation the Secretary or the Inspectors (as the case may be) shall determine that the Consent is valid and that the action therein specified has been validly authorized, that fact shall forthwith be certified on the records of the corporation kept for the purpose of recording the proceedings of meetings of stockholders, and the Consent shall be filed in such records, at which time the Consent shall become effective as stockholder action. In conducting the investigation required by this Section 2, the Secretary or the Inspectors (as the case may be) may, at the expense of the corporation, retain special legal counsel and any other necessary or appropriate professional advisors, and such other personnel as they may deem necessary or appropriate to assist them, and shall be fully protected in relying in good faith upon the opinion of such counsel or advisors.

ARTICLE VII MISCELLANEOUS DIVIDENDS AND RESERVES

Section 1. Dividends upon the capital stock of the corporation may be declared as permitted by law by the Board or the Executive Committee at any regular or special meeting. Before payment of any dividend or making any distribution of profits, there may be set aside out of the surplus or net profits of the corporation such sum or sums as the Board or the Executive Committee, from time to time, in their absolute discretion, think proper as a reserve fund to meet contingencies, or for such other purposes as the Board or Executive Committee shall think conducive to the interests of the corporation, and any reserve so established may be abolished and restored to the surplus account by like action of the Board or the Executive Committee.

SEAL

Section 2. The seal of the corporation shall bear the corporate name of the corporation, the year of its incorporation and the words "Corporate Seal, Delaware".

WAIVER

Section 3. Whenever any notice whatever is required to be given by statute or under the provisions of the Restated Certificate of Incorporation or these By-Laws, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

Neither the business to be transacted at, nor the purpose of, any annual or special meeting of the stockholders or the Board, as the case may be, need be specified in any waiver of notice of such meeting.

FISCAL YEAR

Section 4. The fiscal year of the corporation shall begin with January first and end with December thirty-first.

CONTRACTS

Section 5. Except as otherwise required by law, the Restated Certificate of Incorporation or these By-Laws, any contracts or other instruments may be executed and delivered in the name and on the behalf of the corporation by such officer or officers of the corporation as the Board may from time to time direct. Such authority may be general or confined to specific instances as the Board may determine. The Chairman of the Board, the President or any Vice President may execute bonds, contracts, deeds, leases and other instruments to be made or executed for or on behalf of the corporation. Subject to any restrictions imposed by the Board, the Chairman of the Board, the President or any Vice President of the corporation may delegate contractual powers to others under his jurisdiction, it being understood, however, that any such delegation of power shall not relieve such officer of responsibility with respect to the exercise of such delegated power.

PROXIES

Section 6. Unless otherwise provided by resolution adopted by the Board, the Chairman of the Board, the President or any Vice President may from time to time appoint an attorney or attorneys or agent or agents of the corporation, in the name and on behalf of the corporation, to cast the votes which the corporation may be entitled to cast as the holder of stock or other securities in any other corporation or other entity, any of whose stock or other securities may be held by the corporation, at meetings of the holders of the stock or other securities of such other corporation or other entity, or to consent in writing, in the name of the corporation as such holder, to any action by such other corporation or other entity, and may instruct the person or persons so appointed as to the manner of casting such votes or giving such consent, and may execute or cause to be executed in the name and on behalf of the corporation and under its corporate seal or otherwise, all such written proxies or other instruments as he may deem necessary or proper in the premises.

AMENDMENTS

Section 7. The Board from time to time shall have the power to make, alter, amend or repeal any and all of these By-Laws, but any By-Laws so made, altered or repealed by the Board may be amended, altered or repealed by the stockholders.

CERTIFICATION

The undersigned hereby certifies that he is the duly elected and acting Secretary of Newport News Shipbuilding Inc., a Delaware corporation, and the keeper of its corporate records and minutes. The undersigned further hereby certifies that the above and foregoing is a true and correct copy of the By-Laws of said corporation, as in force at the date hereof.

WITNESS the hand of the undersigned and the seal of said corporation, this _____ day of _____, 19 ____

Secretary

P

KM10000480

**EXHIBIT P
TO
DISTRIBUTION
AGREEMENT**

TRADEMARK TRANSITION LICENSE AGREEMENT

Agreement made as of _____, ("Effective Date") by and between [Industrial Company], a corporation organized and existing under the laws of the State of Delaware, whose principal place of business is located at 1275 King St., Greenwich, CT 06831-2946, hereinafter referred to as Licensor, and Tenneco Inc., a corporation organized under the laws of the State of Delaware, whose principal place of business is located at 1010 Milam St., Houston, TX 77002, hereinafter referred to as Licensee,

Whereas, Licensor has adopted and is using the name and mark "Tenneco", alone and in combination with other terms and/or symbols and variations thereof including "Tenn-Speed", "Tenn-Speed 2" and "Tennnet", in the United States and elsewhere throughout the world and is the owner of the U.S. Trademark Applications and the U.S. Trademark Registrations, listed on Exhibit A of this Agreement, from the United States Patent and Trademark Office, (hereinafter collectively referred to as the "Trademark"); and

Whereas, Licensee is desirous of using said Trademark with respect to the goods and services listed on Exhibit B, to assist Licensee in its transition to a new identity and for the limited purposes more fully described below;

Now, therefore, in consideration of the foregoing Recitals which are hereby incorporated into the operative terms hereof, the mutual promises contained in this Agreement and good and valuable consideration from the Licensee to the Licensor, the receipt and sufficiency of which is hereby acknowledged by said Licensor, the parties hereby agree as follows:

1. License. Licensor grants to Licensee and its subsidiary companies the limited, non-exclusive right to use the Trademark under the common law and under the auspices and privileges provided by any of the registrations covering the same during the term of this Agreement, and Licensee hereby undertakes to use the Trademark as follows:

a. For a period of 30 days following the Effective Date of this Agreement, Licensee may use the Trademark in its corporate name. After 30 days following the Effective Date of this Agreement, Licensee shall change, if necessary, its corporate name to delete the Trademark or any other word that is confusingly similar to the Trademark (except the word "Tennessee");

b. For a period of six (6) months following the Effective Date of this Agreement, Licensee shall be entitled to use its existing supplies and documents which have imprinted thereon the Trademark to the extent that such supplies and documents were existing inventory prior to the Effective Date of this Agreement. Licensee shall not print any new supplies or documents bearing the Trademark as of the Effective Date of this Agreement.

c. For a period of two years from the Effective Date of this Agreement, Licensee may use the Trademark on existing signs, displays or other identifications or advertising material (except as limited in b above). Licensee shall not prepare or install any new signs, displays or other identifications or advertising material bearing the Trademark. Licensee shall remove any and all references to the Trademark from any and all signs, displays or other identifications or advertising material by the end of the two year period.

2. Quality of Services. Licensee agrees to maintain such quality standards as shall be prescribed by Licensor in the conduct of the business operations with which the Trademark is used. Licensee shall use the Trademark only with goods and services listed in Exhibit B rendered by Licensee in accordance with the terms of this agreement and with the guidance and directions furnished to the Licensee by the Licensor, or its authorized representatives or agents, from time to time, if any; but always the quality of the goods and services shall be satisfactory to the Licensor or as specified by it.

3. **Inspection.** Licensee will permit duly authorized representatives of the Licensor to inspect the premises of Licensee using the Trademarks at all reasonable times, for the purpose of ascertaining or determining compliance with Paragraphs 1 and 2 hereof.

4. **Use of Trademark.** When using the Trademark under this Agreement, Licensee undertakes to comply substantially with all laws pertaining to the Trademark. This provision includes compliance with marking requirements. Licensee represents and warrants that all goods and services to be sold under the Trademark and the marketing, sales, and distribution of them shall meet or exceed all federal, state, and local laws, ordinances, standards, regulations, and guidelines pertaining to such products or activities, including, but not limited to, those pertaining to product safety, quality, labeling and propriety. Licensee agrees that it will not package, market, sell, or distribute any goods or services or cause or permit any goods or services to be packaged, marketed, sold, or distributed in violation of any such federal, state, or local law, ordinance, standard, regulation, or guideline.

5. **Extent of License.** The license granted herein is for the sole purpose of assisting Licensee in its transition to a new identity and is not assignable or transferable in any manner whatsoever. Licensee has no right to grant any sublicenses or to use the Trademark for any other purpose.

6. **Indemnity.** Licensee acknowledges that it will have no claims against Licensor for any damage to property or injury to persons arising out of the operation of Licensee's business. Licensee agrees to indemnify, hold harmless, and defend Licensor and its subsidiaries and its authorized representatives with legal counsel acceptable to Licensor from and against any and all demands, claims, injuries, losses, damages, actions, suits, causes of action, proceedings, judgments, liabilities and expenses, including attorneys' fees, court costs and other legal expenses, arising out of or connected with:

a. Licensee's use of the Trademark; or

b. any breach by Licensee of any provision of this Agreement or of any warranty made by Licensee in this Agreement.

No approval by Licensor of any action by Licensee shall affect any right of Licensor to indemnification hereunder.

7. **Termination.** Except as otherwise provided herein, this Agreement shall remain in full force and effect for the periods stated in Paragraph 1, above. However, Licensor retains the right to immediately terminate this Agreement in the event of a material breach of any term of this Agreement by Licensee, upon written notice to the Licensee.

8. **Ownership of Trademark.** The Licensee acknowledges Licensor's exclusive right, title and interest in and to the Trademark and will not at any time do or cause to be done any act or thing contesting or in any way impairing or tending to impair any part or all of such right, title and interest. In connection with the use of the Trademark, Licensee shall not in any manner represent that it has any ownership in the Trademark or registrations thereof, and acknowledges that use of the Trademark shall emure to the benefit of the Licensor. On termination of this Agreement or any portion thereof in any manner provided herein, the Licensee will destroy all signs, displays or other identifications or advertising material, supplies and documents, and any other materials bearing the Trademark and will certify to Licensor in writing that it has done so. Furthermore, Licensee will not at any time adopt or use without the Licensor's prior written consent, any word or mark which is likely to be similar to or confusing with the Trademark (except the word "Tennessee").

9. **Infringement of Trademark.** If Licensee learns of any actual or threatened infringement of the Trademark or of the existence, use, or promotion of any mark or design similar to the Trademark, Licensee shall promptly notify Licensor. Licensor has the right to decide at its sole discretion what legal proceedings or other action, if any, shall be taken, by who, how such proceedings or other action shall be conducted, and in whose name such proceedings or other action shall be performed. Any legal proceedings instituted pursuant to this Section shall be for the sole benefit of Licensor and all sums recovered in such proceedings, whether by judgment, settlement, or otherwise, shall be retained solely and exclusively by Licensor.

10. Injunctive Relief. Licensee acknowledges that any breach or threatened breach of any of Licensee's covenants in this Agreement relating to the Trademark, including, without limitation, Licensee's failure to cease the manufacture, sale, marketing, or distribution of the goods bearing the Trademark at the termination or expiration of this Agreement will result in immediate and irreparable damage to Licensor and to the rights of any subsequent Licensee of them. Licensee acknowledges and admits that there is no adequate remedy at law for failure to cease such activities, and Licensee agrees that in the event of such breach or threatened breach, Licensor shall be entitled to temporary and permanent injunctive relief and such other relief as any court with jurisdiction may deem just and proper.

11. Severability. If any provision of this Agreement shall be determined to be illegal and unenforceable by any court of law or any competent government or other authority, the remaining provisions shall be severable and enforceable in accordance with their terms so as this Agreement without such terms or provisions does not fail of its essential purpose or purposes. The parties will negotiate in good faith to replace any such illegal or unenforceable provision or provisions with suitable substitute provisions which maintain the economic purposes and intentions of this Agreement.

12. Notice. Any notices required or permitted to be given under this Agreement shall be deemed sufficiently given if mailed by registered mail, postage prepaid, addressed to the party to be notified at its address shown above, (followed by facsimile) or at such other address as may be furnished in writing to the notifying party.

13. Miscellaneous.

a. Captions. The captions for each Section have been inserted for the sake of convenience and shall not be deemed to be binding upon the parties for the purpose of interpretation of this Agreement.

b. Interpretation. The parties agree that each party and its counsel has reviewed this Agreement and the normal rule of construction that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

c. Waiver. The failure of Licensor to insist in any one or more instances upon the performance of any term, obligation, or condition of this Agreement by Licensee or to exercise any right or privilege herein conferred upon Licensor shall not be construed as thereafter waiving such term, obligation, or condition, or relinquishing such right or privilege, and the acknowledged waiver or relinquishment by Licensor of any default or right shall not constitute waiver of any other default or right. No waiver shall be deemed to have been made unless expressed in writing.

d. Time of Essence. Time is of the essence with respect to the obligations to be performed under this Agreement, and Licensee shall use its best efforts to transition all existing materials, including signs and displays, bearing the Trademark to a new name and mark.

e. Rights Cumulative. Except as expressly provided in this Agreement, and to the extent permitted by law, any remedies described in this Agreement are cumulative and not alternative to any other remedies available at law or in equity.

Attest:

Attest:

LICENSOR

By: _____

LICENSOR

By: _____

EXHIBIT "A"

<u>TRADEMARK</u>	<u>REGISTRATION NO.</u>	<u>EXPIRATION DATE</u>
Tenneco	1050475	19OC1996
Tenneco	866995	25MR2009
Tenneco	823408	31JA2007
Tenneco	786614	16MR2005
Tenneco	783055	12JA2005
Tenneco	827435	18AP2007
Tenneco	1250178	06SE2003
Tenneco	1251601	20SE2003
Tenneco	1310943	25DE2004
Tenneco	1930571	31OC2005
Tenneco	1917869	12SE2005
Tennnet	1956845	13FE2006
Tennnet	1929997	24OC2005
Tenneco & Shield	831633	14JL2007
Tenneco & Shield	857262	24SE1998
Tenneco & Shield	823409	31JA2007
Tenneco & Shield	827436	18AP2007
Tenneco & Shield	786595	16MR2005
Tenneco & Shield	786984	23MR2005
Tenneco & Shield	1250177	06SE2003
Tenneco & Shield	1236187	03MY2003
Tenneco & Shield	1310944	25DE2004
Tenneco & Shield	1614779	25SE2000
Tenn-Speed	1542283	06JU2009
Tenn-Speed 2	1841694	28JU2004
Tenn-Speed 2	1855752	27SE2004
<u>TRADEMARK</u>	<u>APPLICATION NO.</u>	<u>APPLICATION DATE</u>
Tenneco	731906	13SE1995
Tenneco	521074	09MY1994
Tenneco & Horizon	731464	13SE1995

EXHIBIT B

Natural gas.

Business management and planning services in the field of natural gas, liquefied natural gas, power generation and cogeneration projects; and economic analysis.

Telephone calling card services.

Computer programs for use as an interactive request system for the transportation and exchange of natural gas.

Books, brochures, printed instructional materials and computer manuals in the field of computer programs which are used as an interactive request system for the transportation and exchange of natural gas.

Management of construction.

Telecommunications services.

Transportation by pipeline and storage of natural gas, and transmission of oil or gas through pipelines.

Educational services, namely conducting classes, conferences, and workshops, regarding the training of others in the operation, maintenance, and management of facilities relating to the natural gas industry, natural gas pipelines, natural gas and liquefied natural gas facilities, and cogeneration and power generation stations.

Engineering and drafting services; technical consulting in the field of energy; and inspection and supervision of maintenance services provided by others.

Ships

Custom and naval shipbuilding, drydock and ship repair services.

Naval architectural design.

Q

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**EXHIBIT Q
TO
DISTRIBUTION
AGREEMENT**

TRADEMARK TRANSITION LICENSE AGREEMENT

Agreement made as of _____, ("Effective Date") by and between [Industrial Company], a corporation organized and existing under the laws of the State of Delaware, whose principal place of business is located at 1275 King St., Greenwich, CT 06831-2946, hereinafter referred to as Licensor, and [Newport News Shipbuilding and Drydock Company], a corporation organized under the laws of the State of Virginia, whose principal place of business is located at 4101 Washington Avenue, Newport News, Virginia 23607, hereinafter referred to as Licensee,

Whereas, Licensor has adopted and is using the name and mark "Tenneco", alone and in combination with other terms and/or symbols and variations thereof including "Tenn-Speed", "Tenn-Speed 2" and "Tennnet", in the United States and elsewhere throughout the world and is the owner of the U.S. Trademark Applications and the U.S. Trademark Registrations, listed on Exhibit A of this Agreement, from the United States Patent and Trademark Office, (hereinafter collectively referred to as the "Trademark"); and

Whereas, Licensee is desirous of using said Trademark with respect to the goods and services listed on Exhibit B, to assist Licensee in its transition to a new identity and for the limited purposes more fully described below;

Now, therefore, in consideration of the foregoing Recitals which are hereby incorporated into the operative terms hereof, the mutual promises contained in this Agreement and good and valuable consideration from the Licensee to the Licensor, the receipt and sufficiency of which is hereby acknowledged by said Licensor, the parties hereby agree as follows:

1. License. Licensor grants to Licensee and its subsidiary companies the limited, non-exclusive right to use the Trademark under the common law and under the auspices and privileges provided by any of the registrations covering the same during the term of this Agreement, and Licensee hereby undertakes to use the Trademark as follows:

a. For a period of 30 days following the Effective Date of this Agreement, Licensee may use the Trademark in its corporate name. After 30 days following the Effective Date of this Agreement, Licensee shall change, if necessary, its corporate name to delete the Trademark or any other word that is confusingly similar to the Trademark (except the word "Tennessee");

b. For a period of six (6) months following the Effective Date of this Agreement, Licensee shall be entitled to use its existing supplies and documents which have imprinted thereon the Trademark to the extent that such supplies and documents were existing inventory prior to the Effective Date of this Agreement. Licensee shall not print any new supplies or documents bearing the Trademark as of the Effective Date of this Agreement.

c. For a period of one year from the Effective Date of this Agreement, Licensee may use the Trademark on existing signs, displays or other identifications or advertising material (except as limited in b above). Licensee shall not prepare or install any new signs, displays or other identifications or advertising material bearing the Trademark. Licensee shall remove any and all references to the Trademark from any and all signs, displays or other identifications or advertising material by the end of the one year period.

2. Quality of Services. Licensee agrees to maintain such quality standards as shall be prescribed by Licensor in the conduct of the business operations with which the Trademark is used. Licensee shall use the Trademark only with goods and services listed in Exhibit B rendered by Licensee in accordance with the terms of this

agreement and with the guidance and directions furnished to the Licensee by the Licensor, or its authorized representatives or agents, from time to time, if any; but always the quality of the goods and services shall be satisfactory to the Licensor or as specified by it.

3. Inspection. Licensee will permit duly authorized representatives of the Licensor to inspect the premises of Licensee using the Trademarks at all reasonable times, for the purpose of ascertaining or determining compliance with Paragraphs 1 and 2 hereof.

4. Use of Trademark. When using the Trademark under this Agreement, Licensee undertakes to comply substantially with all laws pertaining to the Trademark. This provision includes compliance with marking requirements. Licensee represents and warrants that all goods and services to be sold under the Trademark and the marketing, sales, and distribution of them shall meet or exceed all federal, state, and local laws, ordinances, standards, regulations, and guidelines pertaining to such products or activities, including, but not limited to, those pertaining to product safety, quality, labeling and propriety. Licensee agrees that it will not package, market, sell, or distribute any goods or services or cause or permit any goods or services to be packaged, marketed, sold, or distributed in violation of any such federal, state, or local law, ordinance, standard, regulation, or guideline.

5. Extent of License. The license granted herein is for the sole purpose of assisting Licensee in its transition to a new identity and is not assignable or transferable in any manner whatsoever. Licensee has no right to grant any sublicenses or to use the Trademark for any other purpose.

6. Indemnity. Licensee acknowledges that it will have no claims against Licensor for any damage to property or injury to persons arising out of the operation of Licensee's business. Licensee agrees to indemnify, hold harmless, and defend Licensor and its subsidiaries and its authorized representatives with legal counsel acceptable to Licensor from and against any and all demands, claims, injuries, losses, damages, actions, suits, causes of action, proceedings, judgments, liabilities and expenses, including attorneys' fees, court costs and other legal expenses, arising out of or connected with:

a. Licensee's use of the Trademark; or

b. any breach by Licensee of any provision of this Agreement or of any warranty made by Licensee in this Agreement.

No approval by Licensor of any action by Licensee shall affect any right of Licensor to indemnification hereunder.

7. Termination. Except as otherwise provided herein, this Agreement shall remain in full force and effect for the periods stated in Paragraph 1, above. However, Licensor retains the right to immediately terminate this Agreement in the event of a material breach of any term of this Agreement by Licensee, upon written notice to the Licensee.

8. Ownership of Trademark. The Licensee acknowledges Licensor's exclusive right, title and interest in and to the Trademark and will not at any time do or cause to be done any act or thing contesting or in any way impairing or tending to impair any part or all of such right, title and interest. In connection with the use of the Trademark, Licensee shall not in any manner represent that it has any ownership in the Trademark or registrations thereof, and acknowledges that use of the Trademark shall enure to the benefit of the Licensor. On termination of this Agreement or any portion thereof in any manner provided herein, the Licensee will destroy all signs, displays or other identifications or advertising material, supplies and documents, and any other materials bearing the Trademark and will certify to Licensor in writing that it has done so. Furthermore, Licensee will not at any time adopt or use without the Licensor's prior written consent, any word or mark which is likely to be similar to or confusing with the Trademark (except the word "Tennessee").

9. Infringement of Trademark. If Licensee learns of any actual or threatened infringement of the Trademark or of the existence, use, or promotion of any mark or design similar to the Trademark, Licensee shall promptly notify Licensor. Licensor has the right to decide at its sole discretion what legal proceedings or other action, if

any, shall be taken, by who, how such proceedings or other action shall be conducted, and in whose name such proceedings or other action shall be performed. Any legal proceedings instituted pursuant to this Section shall be for the sole benefit of Licensor and all sums recovered in such proceedings, whether by judgment, settlement, or otherwise, shall be retained solely and exclusively by Licensor.

10. Injunctive Relief. Licensee acknowledges that any breach or threatened breach of any of Licensee's covenants in this Agreement relating to the Trademark, including, without limitation, Licensee's failure to cease the manufacture, sale, marketing, or distribution of the goods bearing the Trademark at the termination or expiration of this Agreement will result in immediate and irreparable damage to Licensor and to the rights of any subsequent Licensee of them. Licensee acknowledges and admits that there is no adequate remedy at law for failure to cease such activities, and Licensee agrees that in the event of such breach or threatened breach, Licensor shall be entitled to temporary and permanent injunctive relief and such other relief as any court with jurisdiction may deem just and proper.

11. Severability. If any provision of this Agreement shall be determined to be illegal and unenforceable by any court of law or any competent government or other authority, the remaining provisions shall be severable and enforceable in accordance with their terms so as this Agreement without such terms or provisions does not fail of its essential purpose or purposes. The parties will negotiate in good faith to replace any such illegal or unenforceable provision or provisions with suitable substitute provisions which maintain the economic purposes and intentions of this Agreement.

12. Notice. Any notices required or permitted to be given under this Agreement shall be deemed sufficiently given if mailed by registered mail, postage prepaid, addressed to the party to be notified at its address shown above, (followed by facsimile) or at such other address as may be furnished in writing to the notifying party.

13. Miscellaneous.

a. Captions. The captions for each Section have been inserted for the sake of convenience and shall not be deemed to be binding upon the parties for the purpose of interpretation of this Agreement.

b. Interpretation. The parties agree that each party and its counsel has reviewed this Agreement and the normal rule of construction that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement.

c. Waiver. The failure of Licensor to insist in any one or more instances upon the performance of any term, obligation, or condition of this Agreement by Licensee or to exercise any right or privilege herein conferred upon Licensor shall not be construed as thereafter waiving such term, obligation, or condition, or relinquishing such right or privilege, and the acknowledged waiver or relinquishment by Licensor of any default or right shall not constitute waiver of any other default or right. No waiver shall be deemed to have been made unless expressed in writing.

d. Time of Essence. Time is of the essence with respect to the obligations to be performed under this Agreement, and Licensee shall use its best efforts to transition all existing materials, including signs and displays, bearing the Trademark to a new name and mark.

e. Rights Cumulative. Except as expressly provided in this Agreement, and to the extent permitted by law, any remedies described in this Agreement are cumulative and not alternative to any other remedies available at law or in equity.

f. Governing Law and Consent to Jurisdiction. ALL QUESTIONS AND/OR DISPUTES CONCERNING THE CONSTRUCTION, VALIDITY AND INTERPRETATION OF THIS AGREEMENT SHALL BE GOVERNED BY THE INTERNAL LAWS, AND NOT THE LAW OF CONFLICTS, OF THE STATE OF DELAWARE. EACH OF THE PARTIES TO THIS AGREEMENT HEREBY IRREVOCABLY AND UNCONDITIONALLY AGREES TO BE SUBJECT TO, AND HEREBY CONSENTS AND SUBMITS TO, THE JURISDICTION OF THE COURTS OF THE STATE OF DELAWARE AND OF THE FEDERAL COURTS SITTING IN THE STATE OF DELAWARE.

Attest:

Attest:

LICENSOR

By: _____

LICENSEE

By: _____

EXHIBIT "A"

<u>TRADEMARK</u>	<u>REGISTRATION NO.</u>	<u>EXPIRATION DATE</u>
Tenneco	1050475	19OC1996
Tenneco	866995	25MR2009
Tenneco	823408	31JA2007
Tenneco	786614	16MR2005
Tenneco	783055	12JA2005
Tenneco	827435	18AP2007
Tenneco	1250178	06SE2003
Tenneco	1251601	20SE2003
Tenneco	1310943	25DE2004
Tenneco	1930571	31OC2005
Tenneco	1917869	12SE2005
Tennnet	1956845	13FE2006
Tennnet	1929997	24OC2005
Tenneco & Shield	831633	14JL2007
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Tenneco & Shield	786984	23MR2005
Tenneco & Shield	1250177	06SE2003
Tenneco & Shield	1236187	03MY2003
Tenneco & Shield	1310944	25DE2004
Tenneco & Shield	1614779	25SE2000
Tenn-Speed	1542283	06JU2009
Tenn-Speed 2	1841694	28JU2004
Tenn-Speed 2	1855752	27SE2004
<u>TRADEMARK</u>	<u>APPLICATION NO.</u>	<u>APPLICATION DATE</u>
Tenneco	731906	13SE1995
Tenneco	521074	09MY1994
Tenneco & Horizon	731464	13SE1995

EXHIBIT B

Ships

Custom and naval shipbuilding, drydock and ship repair services.

Naval architectural design.

**EXHIBIT B TO
AGREEMENT AND PLAN OF MERGER**

**Adjustable Rate Cumulative Preferred Stock
Summary of Principal Terms**

Issuer:	El Paso Natural Gas Company ("EPG")
Number of Shares:	505,875 shares [based on \$34.875 Common Price]
Title of Series:	Adjustable Rate Cumulative Preferred Stock (the "AR Preferred Stock").
Class:	Preferred Stock.
Distribution:	EPG will issue the AR Preferred Stock (or units ("Depository Shares") representing fractional interests in AR Preferred Stock) to common stockholders of Tenneco Inc. ("TI"). EPG shall, at Tenneco's request and sale option, arrange for the issuance of Depository Shares pursuant to a Depository Agreement as described below.
Issuance of Other Series:	Shares of AR Preferred Stock of additional series may be issued from time to time subject to the limitations set forth in the Certificate of Incorporation of EPG and in the resolutions of its Board of Directors providing for any such series which shall be mutually fixed by TI and EPG.
Assigned Value:	\$1,000.00 per share.
Dividend Rate:	The yield on and other terms of the AR Preferred Stock shall be fixed so as to trade at the Assigned Value. The Applicable Rate for each dividend period shall be the average of quotations from at least two Reference Banks, one selected by EPG and one by TI, except that the first dividend payment will be set by Morgan Stanley in the event that Reference Banks for TI and EPG do not agree. The Dividend Rate, however, will not be less than 6.0% per annum nor higher than 10.0% per annum.
Dividend Payment Dates:	Dividends will accrue from the date of issue and will be payable quarterly on the last days of March, June, September and December in each year (a "Dividend Payment Date"). The first dividend payment date shall be the next Dividend Payment Date following the date of issue.
Dividend Rights:	The holders of the AR Preferred Stock will be entitled to cumulative cash dividends only when, as and if declared by the Board of Directors of EPG and out of funds legally available

therefor. Accrued but unpaid dividends on the AR Preferred Stock will not bear interest.

Voting Rights:

- (i) Holders of the AR Preferred Stock will be entitled to 15 votes per share in each matter submitted to a vote at any meeting of EPG's stockholders.
- (ii) Whenever dividends are in arrears for six or more dividend periods, the holders of the AR Preferred Stock, voting separately as a class, will have the exclusive right to appoint two additional directors to EPG's board of directors until such time as all accrued and unpaid dividends on the AR Preferred Stock shall have been paid in full, at which time the term of office of such two directors will terminate.

Maturity:

Twenty years.

Conversion:

The AR Preferred Stock will not be convertible.

Optional Redemption:

The AR Preferred Stock will be redeemable by EPG at its option at any time after the fifth anniversary of the Merger in whole, or in part from time to time, on at least 30 but not more than 60 days notice, at \$1,000.00 (in all cases plus dividends accrued to but excluding the date fixed for redemption).

Other Optional Redemption:

The AR Preferred Stock will be redeemable at any time by and at the option of EPG for EPG common stock having a market value of \$1,000.00 (in all cases plus dividends accrued to but excluding the date fixed for redemption).

Liquidation Value:

\$1,000.00 per share.

Liquidation Rights:

In the event of any liquidation (voluntary or involuntary), dissolution or winding up of the affairs of EPG and before any distribution of assets to holders of stock ranking junior to the AR Preferred Stock, the holders of shares of the AR Preferred Stock then outstanding shall be entitled to receive, out of the assets available for distribution to holders of AR Preferred Stock, an amount per share equal to \$1,000.00 per share plus accrued dividends, if any, to the date of payment.

Rating:

Request will be made for the AR Preferred Stock (and any Depositary Shares) to be rated by Moody's Investors Service, Inc. and Standard & Poor's Ratings Group.

- Depository Agreement:** EPG shall enter into an agreement with a depository reasonably acceptable to TI with respect to the Depository Shares. Such agreement shall be in customary form for publicly traded Depository Shares, shall be in form and substance reasonably acceptable to TI, and shall afford holders of Depository Shares, on a proportionate basis, all rights of holders of AR Preferred Stock, including the right to vote to receive dividends, distributions, etc. In addition, the agreement will allow holders of whole shares of AR Preferred Stock to break up such shares into Depository Shares. The fractional interest in AR Preferred Stock represented by each Depository Share shall be determined by TI and EPG in consultation with Lazard and DLJ, taking into account tax and marketability considerations.
- Listing:** EPG shall use its reasonable best efforts to list the AR Preferred Stock or any Depository Shares on the New York Stock Exchange.
- Miscellaneous:**
- (i) The shares of AR Preferred Stock will be fully paid and nonassessable. The AR Preferred Stock will have no preemptive rights.
 - (ii) If it is reasonably likely that the recipients of the AR Preferred Stock will be taxable upon the receipt of such stock, then, if legally possible, the terms of the AR Preferred Stock shall be restructured (but with no diminution in value and at the sole cost and expense of EPG) to the extent necessary to permit the Spin-offs and the Merger to be tax-free.

terms.pfd

**EXHIBIT C TO
AGREEMENT AND PLAN OF MERGER**

Debt Realignment Plan

(Capitalized terms used but not otherwise defined herein have the meanings ascribed to them in the Agreement and Plan of Merger to which this is attached.)

1. On or prior to the effectiveness of the Spinoffs (which will occur prior to the Merger), Tenneco shall, or shall cause Tennessee Gas Pipeline Company ("TGP") and/or Tenneco Credit Corporation ("TCC") to, tender for, redeem, prepay, defease or let mature, or cause Industrial Subsidiary to offer to exchange its debt for, one or more of the issues of Consolidated Debt (as defined below) (collectively, the "*Debt Realignment*"). Concurrently with the Debt Realignment, Tenneco, TGP and TCC will solicit the consent of the holders of such Consolidated Debt to provide that the relevant debt instruments are amended and that the tendered-for debt is accepted in each case immediately before the Spinoffs. Tenneco reserves the right to determine whether or not it, TGP and/or TCC tenders for, redeems, prepays, defeases, lets mature or leaves outstanding, or causes Industrial Subsidiary to offer to exchange its debt for, any particular issue of Consolidated Debt. The term "*Consolidated Debt*" means indebtedness for money borrowed of Tenneco and its consolidated Energy Subsidiaries (including accrued and accreted interest and fees and expenses).
2. There will not be any restriction on the right of Tenneco and/or its consolidated subsidiaries to incur after the date of the Agreement and Plan of Merger and on or prior to the closing of the Merger additional Consolidated Debt.
3. Tenneco shall, at its expense, have the sole right and authority to, and will use its commercially reasonable efforts to, have in place a credit facility for itself (with such guarantees of its obligations thereunder by the Energy Subsidiaries as it deems necessary) in an aggregate principal amount sufficient (together with other funds available to Tenneco) to fund such tenders, redemptions, prepayments, defeasances and maturities; to pay all the fees, costs and expenses incurred by Tenneco and its subsidiaries in preparing for, negotiating and effecting the Spinoffs, the Merger and the Debt Realignment and any financings in connection therewith; and for other general corporate purposes (including, without limitation, working capital, the repayment or refinancing of Consolidated Debt and the payments of dividends). This facility shall be in effect at, and have a maturity date at least 180 days following, the Effective Time. The aggregate amount of debt including accrued and accreted interest and fees and expenses outstanding as of the Effective Time under this facility is hereinafter called the "*Tenneco Revolving Debt*". Acquiror shall cooperate with Tenneco in arranging such facility and will provide, effective as of the Effective Time, such credit support and undertakings as shall be reasonably requested of it by the providers thereof.
4. All aspects of (x) the Debt Realignment and any financing thereof, and (y) the terms of any consents solicited in respect of or amendments with respect to Consolidated Debt, shall be controlled solely and exclusively by Tenneco. As appropriate, Tenneco shall consult with and update Acquiror from time to time in respect thereof, and Acquiror shall cooperate with Tenneco in connection therewith. Tenneco shall select in its sole discretion the dealer manager for any and all consent solicitations, debt tenders and debt exchanges in respect of Consolidated Debt.

Tenneco and Industrial Subsidiary shall have the right, in their sole discretion, to fix the timing, tender and/or exchange prices, conditions and other terms of and the strategy and amounts of the fees, costs and expenses payable with respect to any and all such consent solicitations, tenders and exchanges.

5. Tenneco, Industrial Subsidiary and Acquiror shall comply with all applicable securities, blue sky and other laws in connection with the Debt Realignment Plan and the other transactions contemplated hereunder.
6. Industrial Subsidiary shall transfer to Tenneco on or prior to the Effective Time all Consolidated Debt acquired by it in any exchange offer undertaken by it.

7. Adjustments shall be made in respect of Consolidated Debt outstanding as of the Effective Time as set forth in the Debt and Cash Allocation Agreement attached as Exhibit C to the Distribution Agreement.
8. Notwithstanding anything contained herein, (a) contemporaneously with the Spinoffs, Tenneco and the Energy Subsidiaries shall be removed as obligor under (and released from liability with respect to) any indebtedness for borrowed money for which Tenneco or its subsidiaries are liable and which are assumed by the Industrial Subsidiary or the Shipbuilding Subsidiary, (b) any Tenneco Revolving Debt shall be prepayable without penalty, subject to customary notice provisions, (c) in respect of publicly-traded Consolidated Debt, between the date of the Merger Agreement and the Effective Time there shall be no (i) extension of maturity or average life, (ii) increase in interest rates or (iii) adverse change in defeasance or redemption provisions with respect to any indebtedness for borrowed money for which Tenneco or the Energy Subsidiaries will be liable on or after the Effective Time and (d) except for the Tenneco Revolving Debt, no indebtedness for borrowed money of Tenneco or the Energy Subsidiaries at the Effective Time shall contain any affirmative or negative financial or operational covenants other than ones that are (x) mutually acceptable to Tenneco and Acquiror or (y) no more restrictive in the aggregate and substantially equivalent to those set forth in the Indenture dated as of January 1, 1992 of El Paso Natural Gas Company as in effect as of the date of the Merger Agreement (other than Section 10.05 of the Indenture).

**EXHIBIT D TO
AGREEMENT AND PLAN OF MERGER**

Adjustments to Equity Consideration

If Tenneco or the Energy Subsidiaries have not repurchased prior to the Effective Time the entire equity interest of Ruhrgas AG in Tenneco Energy Resources Corporation, the Equity Consideration shall be \$700,000,000.

**EXHIBIT E TO
AGREEMENT AND PLAN OF MERGER**

**EXHIBIT E TO
AGREEMENT AND PLAN OF MERGER***

TENNECO INC.

**Form of
Certificate of Designation,
Preferences and Rights of Preferred Stock
by Resolution of the Board of Directors
Providing for an Issue of
_____ Shares
of Junior Preferred Stock Designated
"\$ _____ Cumulative Junior Preferred Stock"**

I, Robert T. Blakely, Executive Vice President of Tenneco Inc. (hereinafter referred to as the "Corporation"), a corporation organized and existing under the General Corporation Law of the State of Delaware, in accordance with the provisions of Section 151 thereof, DO HEREBY CERTIFY:

That pursuant to authority conferred upon the Board of Directors by the Certificate of Incorporation of said Corporation, as amended (hereinafter referred to as the "Certificate of Incorporation") to issue Junior Preferred Stock, without par value, of the Corporation in one or more series, the Board of Directors adopted a resolution providing for the issuance of a series of Junior Preferred Stock, to be designated "\$ _____ Cumulative Junior Preferred Stock," which resolution is as follows:

RESOLVED, that pursuant to the authority vested in the Board of Directors of the Corporation by the Certificate of Incorporation, a series of Junior Preferred Stock, without par value, of the Corporation be, and hereby is, created, to be designated "\$ _____ Cumulative Junior Preferred Stock" (hereinafter referred to as the "\$ _____ Preferred Stock"), consisting of _____ shares, and, to the extent that the powers, preferences and relative and other special rights, and the qualifications, limitations and restrictions thereof, of the \$ _____ Preferred Stock are not stated and expressed in the Certificate of Incorporation, the powers, preferences and relative and other special rights, and the qualifications, limitations and restrictions thereof, are hereby fixed and stated to be as follows (all terms used herein which are defined in the Certificate of Incorporation shall be deemed to have the meanings provided therein):

- * This Certificate of Designation is an indication of Acquiror's intention with respect to the \$ _____ Preferred Stock. The final terms and conditions of the \$ _____ Preferred Stock shall be determined by Acquiror subject to the consent of Tenneco which will not unreasonably be withheld.

[Subject to completion]

exhmerg8.agt/6

Section 1. *Dividends.* The dividend rate on the \$_____ Preferred Stock shall be \$_____ per annum (\$_____ per quarter-year) [Dividend rate to be negotiated with the purchaser(s) or, in the case of a spinoff to common stockholders of Tenneco, by mutual agreement between the financial advisors designated by Acquiror and Tenneco or, if they unable to agree by Morgan Stanley & Co. Incorporated]. Dividends on shares of the \$_____ Preferred Stock shall accrue, whether or not earned or declared, on a daily basis from the date of issuance and shall be cumulative (but shall not bear interest). Dividends on the \$_____ Preferred Stock shall be payable, when, as and if declared by the Board of Directors of the Corporation out of funds legally available therefor, quarter-yearly on the last days of March, June, September and December in each year (each, a "Dividend Payment Date"), with the first dividend payment date being the next Dividend Payment Date following the date of issuance. Dividends payable on the \$_____ Preferred Stock for any period shorter than a quarter-yearly dividend period shall be computed on the basis of a 360-day year of twelve 30-day months. The \$_____ Preferred Stock shall rank on a parity with each other series of Junior Preferred Stock as to dividends, except to the extent provided in the resolution or resolutions providing for the issuance of such other series.

Section 2. *Liquidation Rights.* The amount that the holders of \$_____ Preferred Stock shall be entitled to receive in the event of any dissolution, liquidation or winding up of the affairs of the Corporation, whether voluntary or involuntary (collectively, a "Liquidation"), shall be \$1,000 per share, plus an amount equal to all accrued and unpaid dividends to the date of Liquidation, and no more (the "Liquidation Value"). After such amount is paid in full, no further distributions or payments shall be made in respect of shares of \$_____ Preferred Stock, such shares of \$_____ Preferred Stock shall no longer be deemed to be outstanding or be entitled to any powers, preferences, rights or privileges, including voting rights, and such shares of \$_____ Preferred Stock shall be surrendered for cancellation to the Corporation.

Section 3. *Voting Rights.*

(a) Except as otherwise provided in the Certificate of Incorporation, as expressly set forth in paragraphs (b) and (c) below or as required by law, the holders of shares of \$_____ Preferred Stock shall not be entitled to vote on any matter on which the holders of any voting securities of the Corporation shall be entitled to vote.

(b) Holders of the \$_____ Preferred Stock will be entitled, voting separately as a class, at each meeting of the stockholders held for the purpose of electing directors, to elect a number of directors of the Corporation, rounded up to the nearest whole number, representing one-sixth (1/6) of the members of the Board of Directors of the Corporation.

(c) Whenever, at any time or times, dividends payable on the \$_____ Preferred Stock shall be in arrears in an aggregate amount equivalent to six or more full quarter-yearly dividends, the holders of outstanding \$_____ Preferred Stock shall

have the exclusive right, voting separately as a class, at each meeting of the stockholders held for the purpose of electing directors, to elect two directors of the Corporation, and the remaining directors shall be elected by the holders of the class or classes or series of stock entitled to vote therefor, until such time as all accrued and unpaid dividends on the \$_____ Preferred Stock shall have been paid in full, at which time the right of the holders of the \$_____ Preferred Stock to vote pursuant to the provisions of this paragraph (c) of Section 3 shall terminate, subject to revesting in the event of each and every subsequent default of the character and for the time above mentioned.

At any time when such voting rights shall, pursuant to the provisions of this paragraph (c) of Section 3, be vested in the \$_____ Preferred Stock, the number of directors of the Corporation shall be not less than that number required so that such two additional directors may be elected by the holders of the \$_____ Preferred Stock, and a proper officer of the Corporation shall, upon the written request of the holders of record of at least ten percent in aggregate liquidation preference of the \$_____ Preferred Stock then outstanding, addressed to the Secretary of the Corporation, call a special meeting of holders of the \$_____ Preferred Stock and of any other class or classes of stock having voting power with respect to the election of directors. Such meeting shall be held at the earliest practicable date at the place at which the last preceding annual meeting of the stockholders of the Corporation was held, but may be held at the time and place of the annual meeting if such annual meeting is to be held within 60 days after such voting rights shall be vested in the holders of the \$_____ Preferred Stock pursuant to the provisions of this paragraph (c) of Section 3. If such meeting shall not be called by the proper officer of the Corporation as required within 20 days after personal service of the said written request upon the Secretary of the Corporation, or within 20 days after mailing the same within the United States of America by registered mail addressed to the Secretary of the Corporation at its principal office (such mailing to be evidenced by the registry receipt issued by the postal authorities), then the holders of record of at least ten percent in aggregate liquidation preference of the \$_____ Preferred Stock then outstanding may designate in writing one of their number to call such meeting, and such meeting may be called by such person designated upon the notice required for annual meetings of stockholders and shall be held at the place at which the last preceding annual meeting of the stockholders of the Corporation was held. Any holder of the \$_____ Preferred Stock so designated shall have access to the stock books of the Corporation for the purpose of causing a meeting of stockholders to be called pursuant to this provision.

At any meeting so called, and at any other meeting of stockholders held for the purpose of electing directors at which the holders of the \$_____ Preferred Stock shall have the right, voting separately as a class, to elect directors of the Corporation, the presence in person or by proxy of a majority of the outstanding shares of the \$_____ Preferred Stock shall be required to constitute a quorum of such class for the election of any director by the holders of the \$_____ Preferred Stock voting as a class. At any such meeting or adjournment thereof, (x) the absence of a quorum of the holders of the \$_____ Preferred Stock shall not prevent the election of directors other

than those to be elected by the holders of the \$____ Preferred Stock voting as a class, and the absence of a quorum for the election of such other directors shall not prevent the election of the directors to be elected by the holders of the \$____ Preferred Stock voting as a class, and (y) in the absence of either or both such quorums, a majority of the holders present in person or by proxy of the stock or stocks which lack a quorum shall have power to adjourn the meeting for the election of directors which they are entitled to elect from time to time without notice other than announcement at the meeting until a quorum shall be present.

Upon any termination of the right of the holders of the \$____ Preferred Stock to vote for directors as a class pursuant to the provisions of this paragraph (c) of Section 3, the term of office of the directors so elected by the holders of the \$____ Preferred Stock shall terminate.

Section 4. *Redemption.*

(a) At any time after the fifth anniversary of the date of issuance of the \$____ Preferred Stock, the \$____ Preferred Stock shall be redeemable in whole or in part, at any time or from time to time, at the option of the Corporation at the Liquidation Value.

(b) Notice of redemption will be given by mail, not less than 30 nor more than 60 days prior to the date fixed for redemption thereof, to each record holder of the shares of the \$____ Preferred Stock to be redeemed at the address of such holder in the stock register of the Corporation. If a notice of redemption has been given, from and after the specified redemption date (unless the Corporation defaults in making payment of the redemption price), dividends on the \$____ Preferred Stock so called for redemption will cease to accrue, such shares will no longer be deemed to be outstanding, and all rights of the holders thereof as stockholders of the Corporation (except the right to receive the redemption price) will cease. Subject to applicable escheat and similar abandoned property laws, any moneys set aside by the Corporation for such redemption and unclaimed at the end of two years from the redemption date shall revert to the general funds of the Corporation, after which reversion the holders of such shares so called for redemption shall look only to the general funds of the Corporation for the payment of the amounts payable upon such redemption. Any interest accrued on funds so deposited shall be paid to the Corporation from time to time.

(c) Any shares of the \$____ Preferred Stock which shall have been redeemed or otherwise acquired by the Corporation shall be restored to the status of authorized but unissued shares of Preferred Stock undesignated as to series.

Section 5. *Exchange.*

(a) Whenever at any time or times, dividends payable on the \$____ Preferred Stock shall be in arrears in an aggregate amount equivalent to two or more

full quarter-yearly dividends (but in any event not earlier than the second anniversary of the date of issuance), the shares of \$ ____ Preferred Stock shall be exchangeable, in whole or in part, at any time or from time to time, at the option of the holders thereof, on a share-for-share basis into shares of Preferred Stock, \$.01 par value (the "EPG Preferred Stock"), of El Paso Natural Gas Company ("EPG") having powers, preferences, and relative and other special rights and qualifications, limitations and restrictions substantially identical to the \$ ____ Preferred Stock (except that the EPG Preferred Stock shall not have the voting rights provided in paragraph (b) of Section 3 hereof).

(b) At any time or from time to time after the third anniversary of the date of issuance, the \$ ____ Preferred Stock shall be exchangeable, in whole or in part, at any time or from time to time, at the option of EPG, on a share-for-share basis into shares of EPG Preferred Stock.

(c) The right to exchange shares of \$ ____ Preferred Stock called for redemption shall terminate immediately prior to the close of business on the related redemption date.

(d) Exchange of shares of \$ ____ Preferred Stock at the option of the holder shall be effected by delivering certificates evidencing such shares, together with (i) written notice of exchange specifying the number of shares of \$ ____ Preferred Stock to be exchanged and specifying the name or names (with addresses) in which the certificate or certificates representing the shares of EPG Preferred Stock are to be registered and (ii) a proper assignment to EPG (or in blank) of the certificate(s) for the shares of \$ ____ Preferred Stock surrendered for exchange, to the office or agency to be maintained by EPG for that purpose and otherwise in accordance with exchange procedures established by EPG and the Corporation.

Exchange of shares of \$ ____ Preferred Stock at the option of EPG shall be effected by delivery by EPG to each holder of \$ ____ Preferred Stock of (i) written notice of exchange specifying the number of shares of \$ ____ Preferred Stock of such holder to be exchanged and (ii) a form of assignment to EPG of the certificate(s) for the shares of \$ ____ Preferred Stock to be surrendered, to be completed by the holder and returned with such holder's certificates to the office or agency to be maintained by EPG to which shares of \$ ____ Preferred Stock shall be surrendered for exchange.

Each notice of exchange shall be irrevocable, and each exchange shall be deemed to have been effected immediately prior to the close of business on the date (the "Exchange Date") on which all of the requirements for such exchange shall have been satisfied.

(e) As promptly as practicable after the surrender of certificates for shares of \$ ____ Preferred Stock by a holder as aforesaid, EPG, in accordance with the provisions of this Section 5 shall issue and deliver at said office or agency to such holder, or on his or her written order, a certificate or certificates for the number of

shares of EPG Preferred Stock issuable upon exchange of such shares in accordance with the provisions of this Section 5.

The person in whose name the certificate for shares of EPG Preferred Stock is issued upon such exchange shall be treated for all purposes as the stockholder of record of such shares of EPG Preferred Stock as of the close of business on the Exchange Date; provided, however, that no surrender of \$____ Preferred Stock on any date when the stock transfer books of EPG are closed for any purpose shall be effective to constitute the person or persons entitled to receive the shares of EPG Preferred Stock deliverable upon such exchange as the record holder(s) of such shares of EPG Preferred Stock on such date, but surrender shall be effective (assuming all other requirements for the valid exchange of such shares have been satisfied) to constitute such person or persons as the record holder(s) of such shares of EPG Preferred Stock for all purposes as of the opening of business on the next succeeding day on which such stock transfer books are open, and such exchange shall be at the Exchange Rate in effect on the date that such shares of \$____ Preferred Stock were surrendered for exchange (and such other requirements satisfied) as if the stock transfer books of EPG had not been closed on such date. Upon exchange of shares of \$____ Preferred Stock, the rights of the holder of such shares, as a holder thereof, shall cease.

Holders of shares of \$____ Preferred Stock at the close of business on a record date for any payment of declared dividends shall be entitled to receive the dividend payable on such shares on the corresponding Dividend Payment Date notwithstanding the effective exchange of such shares following such record date and prior to the corresponding Dividend Payment Date. However, shares of \$____ Preferred Stock surrendered for exchange after the close of business on a record date for any payment of dividends and before the opening of business on the next succeeding Dividend Payment Date must be accompanied by payment in cash of an amount equal to the dividend thereon attributable to the current quarterly dividend period which is to be paid on such Dividend Payment Date (unless such shares are subject to redemption on a redemption date between such record date and such Dividend Payment Date). A holder of shares of \$____ Preferred Stock called for redemption on any Dividend Payment Date shall (if such holder is the registered holder on the applicable record date) receive the dividend on such shares payable on that date and will be able to exchange such shares after the record date for such dividend without paying an amount equal to such dividend to the Corporation upon exchange. Except as provided above, upon any exchange of shares of \$____ Preferred Stock pursuant to this Section 5, the Corporation shall make no payment or allowance for unpaid dividends, whether or not in arrears, on exchanged shares of \$____ Preferred Stock.

If the shares of \$____ Preferred Stock represented by a certificate surrendered for exchange are exchanged in part only, the Corporation shall cause to be issued and delivered to the holder, without charge therefor, a new certificate or certificates representing in the aggregate the number of unexchanged shares.

(f) *Effect of Consolidation or Merger of EPG.* In case of any consolidation or merger to which EPG is a party in which EPG is not the surviving corporation, or in the case of any sale or transfer to another corporation of the property of EPG as an entirety or substantially as an entirety the exchange rights with respect to the \$_____ Preferred Stock shall terminate.

(g) *Actions in Respect of EPG Preferred Stock.* EPG has agreed to take pursuant to the Guarantee such reasonable action which may, in the opinion of EPG's legal counsel, be necessary in order that (i) EPG may validly and legally deliver fully paid and nonassessable shares of EPG Preferred Stock upon any surrender of shares of \$_____ Preferred Stock for exchange pursuant to this Section 5, (ii) the delivery of shares of EPG Preferred Stock in accordance with this Section 5 is exempt from the registration or qualification requirements of the Securities Act and applicable state securities laws or, if no such exemption is available, that the offer and exchange of such shares of EPG Preferred Stock have been duly registered or qualified under the Securities Act and applicable state securities laws, (iii) the shares of EPG Preferred Stock delivered upon such exchange are listed for trading on the New York Stock Exchange or on a national securities exchange (upon official notice of issuance) and (iv) the shares of EPG Preferred Stock delivered upon such exchange are free of preemptive rights and any liens or adverse claims.

Pursuant to the Guarantee, EPG has agreed to at all times reserve and keep available, free from preemptive rights, out of the aggregate of its authorized but unissued EPG Preferred Stock, for the purpose of effecting any exchange of shares of \$_____ Preferred Stock at the option of the holder pursuant to this Section 5, the full number of shares of EPG Preferred Stock then deliverable upon the exchange of all then outstanding shares of \$_____ Preferred Stock (assuming for this purpose that all of the outstanding shares of \$_____ Preferred Stock are held by a single holder).

(h) *Payment of Taxes.* The Corporation shall pay any and all documentary, stamp or similar taxes payable in respect of the delivery of shares of EPG Preferred Stock pursuant to this Section 5; provided, however, that the Corporation shall not be required to pay any tax which may be payable in respect of any registration of transfer involved in the delivery of shares of EPG Preferred Stock in a name other than that of the registered holder of the shares of \$_____ Preferred Stock in respect of which such shares of EPG Preferred Stock are delivered, and no such delivery shall be made unless and until the person requesting such delivery has paid to the Corporation or its designated agent the amount of any such tax or has established, to the satisfaction of the Corporation or such agent, that such tax has been paid.

Section 6. *Increase in Shares.* The number of shares of \$_____ Preferred Stock may, to the extent of the Corporation's authorized and unissued Junior Preferred Stock, be increased, and may be decreased (but not below the number of shares thereof then outstanding), by further resolution duly adopted by the Board of Directors and the filing of a certificate pursuant to the provisions of the

General Corporation Law of the State of Delaware stating that such increase or decrease has been so authorized.

Section 7. Maturity. Unless otherwise redeemed or exchanged as provided herein, the term of the \$____ Preferred Stock shall be perpetual.

IN WITNESS WHEREOF, said Tenneco Inc. has caused this Certificate to be signed by Robert T. Blakely, its Executive Vice President, this ____th day of _____, 199__.

TENNECO INC.

By: _____
Robert T. Blakely
Executive Vice President

EXHIBIT F-1 TO
AGREEMENT AND PLAN OF MERGER

**ENERGY BUSINESS
PRO FORMA BALANCE SHEET
(UNAUDITED)
(MILLIONS)**

<u>ASSETS</u>	<u>1995 DEC 31</u>	<u>PRO FORMA ADJUSTMENTS</u>	<u>PRO FORMA BALANCE</u>
CURRENT ASSETS:			
CASH AND TEMPORARY CASH INVESTMENTS	\$ 248	\$ (212)(6) (20)(11) 9 (14)	\$ 25
RECEIVABLES—			
CUSTOMER NOTES AND ACCOUNTS (NET)	508	(202)(6) (2)(8) (1)(11)	303
AFFILIATED COMPANIES	199	(144)(5) (2)(6)	53
GAS TRANSPORTATION AND EXCHANGE	64		64
INCOME TAXES	133	26 (9)	159
OTHER	436		436
INVENTORIES	24		24
PREPAYMENTS AND OTHER	83	(22)(8) 4 (10)	65
	<u>1,695</u>	<u>(566)</u>	<u>1,129</u>
INVESTMENTS AND OTHER ASSETS:			
INVESTMENT IN AFFILIATED COMPANIES	603	(323) (1)(12)	(1) 279
LONG-TERM RECEIVABLES—			
NOTES AND OTHER (NET)	352	(22)(2) (283)(6) (5)(8)	42
INVESTMENT IN SUBSIDIARIES IN EXCESS OF FAIR VALUE OF NET ASSETS AT DATE OF ACQUISITION, LESS AMORTIZATION	22		22
OTHER	954	31 (7) (2)(6) (353)(8) (16)(14)	614
	<u>1,931</u>	<u>(974)</u>	<u>957</u>
PLANT, PROPERTY AND EQUIPMENT, AT COST	6,272	(43)(12)	6,229
LESS—RESERVES FOR DEPRECIATION, DEPLETION AND AMORTIZATION	3,431	(4)(12)	3,427
	<u>2,841</u>	<u>(39)</u>	<u>2,802</u>
	<u>\$6,467</u>	<u>\$(1,579)</u>	<u>\$4,888</u>

**ENERGY BUSINESS
PRO FORMA BALANCE SHEET
(UNAUDITED)
(MILLIONS)**

<u>LIABILITIES AND COMBINED EQUITY</u>	<u>1995 DEC 31</u>	<u>PRO FORMA ADJUSTMENTS</u>	<u>PRO FORMA BALANCE</u>
CURRENT LIABILITIES:			
SHORT-TERM DEBT (INCLUDING CURRENT MATURITIES)	\$ 869	\$ (155)(6) 24(11) (738)(14)	—
PAYABLES—			
TRADE	365	13 (2)	378
AFFILIATED COMPANIES	88	(86)(5)	2
GAS TRANSPORTATION AND EXCHANGE	28		28
TAXES ACCRUED	525	(12)(2) (500)(3)	13
DEFERRED INCOME TAXES	65	50 (3) (8)(8)	107
INTEREST ACCRUED	102	(16)(6)	86
NATURAL GAS PIPELINE REVENUE RESERVATION	27		27
OTHER	426	(1)(8)	425
	<u>2,495</u>	<u>(1,429)</u>	<u>1,066</u>
LONG-TERM DEBT	3,690	(524)(6) (3,166)(14)	—
DEFERRED INCOME TAXES	541	(23)(2) (5)(3) 11 (4) (14)(6) 12 (7) (130)(8) (103)(13)	289
POSTRETIREMENT BENEFITS	<u>260</u>	<u>(1)(8)</u>	<u>259</u>
DEFERRED CREDITS AND OTHER LIABILITIES	481	16 (1) (32)(4) (2)(8) (23)(11) (4)(13)	436
COMMITMENTS AND CONTINGENCIES			
MINORITY INTEREST	19		19
PREFERRED STOCK WITH MANDATORY REDEMPTION PROVISIONS ..	130		130
COMBINED EQUITY	(1,149)	(339)(1) 455 (3) 21 (4) (58)(5) 8 (6) 19 (7) (240)(8) 26 (9) 4 (10) (22)(11) (40)(12) 107 (13) 3,897 (14)	2,689
	<u>(1,149)</u>	<u>3,838</u>	<u>2,689</u>
	<u>\$6,467</u>	<u>\$(1,579)</u>	<u>\$4,888</u>

ENERGY BUSINESS
NOTES TO PRO FORMA BALANCE SHEET

Pro forma adjustments to reflect certain first quarter 1996 transactions:

- (1) Disposition of Tenneco's remaining investment in Case Corp. common stock.
- (2) Tentative settlement of a note receivable and tax issues with ICH, a company in bankruptcy.
- (3) Payment made for settlement of tax issues with the Internal Revenue Service.
- (4) Reflect removal of the Cummins deferred gain which was recognized in the first quarter of 1996.

Pro forma adjustments to reflect certain events that will occur prior to a sale transaction:

- (5) Capitalize or settle affiliated accounts receivable and accounts payable.
- (6) Reflect the reacquisition by the Automotive/Packaging businesses of trade accounts receivable from Tenneco Credit Corp., the sale of farm and construction equipment notes receivable and the retirement of Tenneco Credit Corp. debt.
- (7) Transfer the Energy Business' computer hardware and share of software development costs held by Tenneco Business Services.
- (8) Reflect the assumption by the Automotive/Packaging businesses of responsibility for the Tenneco Retirement Plan.
- (9) Move the Energy Business' portion of state income tax receivable to the Energy Business.
- (10) Move the Energy Business' portion of prepaid insurance to the Energy Business.
- (11) Record dividend by Eastern Insurance of \$20 million and transfer of Eastern's assets and liabilities related to the Automotive/Packaging businesses.
- (12) Transfer Corporate Aviation assets and certain furniture, fixtures and equipment to the Automotive/Packaging businesses.
- (13) Transfer of "other reserves" and recorded pre-distribution income tax assets and liabilities in accordance with the Tax Sharing Agreement.
- (14) Reflect tender for all Tenneco debt and contribution of cash to reach \$25 million.

External Basis
Tenneco Energy
Pro Forma Statement of Operating Income
Year Ended December 31, 1995
(Millions)

	<u>Before Adjustments</u>	<u>Pro Forma Adjustments</u>	<u>Pro Forma Adjusted</u>
Revenues			
Net Sales and Operating Revenues Energy	\$1,916		\$1,916
Automotive	—		—
Packaging	—		—
Shipbuilding	—		—
Farm and Construction Equipment	—	—	—
Other (Land Use)	5		5
	<u>1,921</u>	<u>—</u>	<u>1,921</u>
Other Income			
Interest Income	85	\$(53)(1)	32
Equity in Net Income of Affiliated Companies	65	—	65
Gain on Sale of Businesses and Assets	12	11 (1)	23
Gain on the Sale by a Subsidiary of its Stock	—		—
Other Income, Net	28		28
	<u>2,111</u>	<u>(42)</u>	<u>2,069</u>
Costs and Expenses			
Cost of Sales	1		1
Cost of Gas Sold	954		954
Operating Expenses	413	(12)(1)	401
Selling, General and Administrative	163	(2)	(1)
		38 (2)	
		10 (3)	209
Finance Charges,—Tenneco Finance	79	(79)(1)	—
Depreciation, Depletion and Amortization	196	6 (4)	202
	<u>1,806</u>	<u>(39)</u>	<u>1,767</u>
Operating Income	<u>\$ 305</u>	<u>\$ (3)</u>	<u>\$ 302</u>

Tenneco Energy
Notes to Pro Forma Statement of Operating Income
Year Ended December 31, 1995

Pro forma adjustments to reflect income statement effects of certain events:

- (1) To remove income realized from Tenneco Credit Corporation assets which will be sold prior to any transaction.
- (2) To remove impact of Tenneco Inc. Retirement Plan.
- (3) To record employee benefit expense related to planned Tenneco Energy defined contribution plan.
- (4) To reflect amortization of capitalized hardware and system development costs related to Tenneco Energy.

**EXHIBIT F-2 TO
AGREEMENT AND PLAN OF MERGER**

**ENERGY BUSINESS
PRO FORMA BALANCE SHEET
(UNAUDITED)
(MILLIONS)**

<u>ASSETS</u>	<u>1996 MAR 31</u>	<u>PRO FORMA ADJUSTMENTS</u>	<u>PRO FORMA BALANCE</u>
CURRENT ASSETS:			
CASH AND TEMPORARY CASH INVESTMENTS	\$ 150	\$ (53)(9) (72)(12)	\$ 25
RECEIVABLES—			
CUSTOMER NOTES AND ACCOUNTS (NET).....	927	(647)(4) (2)(6)	278
AFFILIATED COMPANIES	83	(30)(3)	53
GAS TRANSPORTATION AND EXCHANGE.....	115		115
INCOME TAXES	—	40 (7)	40
OTHER	260	(3)(4)	257
INVENTORIES	25		25
PREPAYMENTS AND OTHER.....	95	(22)(6) 4 (8) (8)(9)	69
	<u>1,655</u>	<u>(793)</u>	<u>862</u>
INVESTMENTS AND OTHER ASSETS:			
INVESTMENT IN AFFILIATED COMPANIES	258	(1)(10)	257
LONG-TERM RECEIVABLES-			
NOTES AND OTHER (NET)	294	(23)(1) (212)(4) (5)(6)	54
INVESTMENT IN SUBSIDIARIES IN EXCESS OF FAIR VALUE OF NET ASSETS AT DATE OF ACQUISITION, LESS AMORTIZATION	22		22
OTHER.....	955	(2)(4) 36 (5) (362)(6) (17)(12)	610
	<u>1,529</u>	<u>(586)</u>	<u>943</u>
PLANT, PROPERTY AND EQUIPMENT, AT COST LESS— RESERVES FOR DEPRECIATION, DEPLETION AND AMORTIZATION	3,469	(4)(10)	3,465
	<u>2,852</u>	<u>(39)</u>	<u>2,813</u>
	<u><u>\$6,036</u></u>	<u><u>\$(1,418)</u></u>	<u><u>\$4,618</u></u>

ENERGY BUSINESS
PRO FORMA BALANCE SHEET
(UNAUDITED)
(MILLIONS)

<u>LIABILITIES AND COMBINED EQUITY</u>	<u>1996 MAR 31</u>	<u>PRO FORMA ADJUSTMENTS</u>	<u>PRO FORMA BALANCE</u>
CURRENT LIABILITIES:			
SHORT-TERM DEBT (INCLUDING CURRENT MATURITIES)	\$ 1,179	\$ (178)(4) (1,001)(12)	—
PAYABLES—			
TRADE	315	13 (1)	328
AFFILIATED COMPANIES	75	(73)(3)	2
GAS TRANSPORTATION AND EXCHANGE	77		77
TAXES ACCRUED	96	(13)(1) (77)(2)	6
DEFERRED INCOME TAXES	42		42
INTEREST ACCRUED	133	(14)(4) (118)(12)	1
NATURAL GAS PIPELINE REVENUE RESERVATION	45		45
OTHER	281	(1)(6)	280
	<u>2,243</u>	<u>(1,462)</u>	<u>781</u>
LONG-TERM DEBT	3,420	(501)(4) (2,919)(12)	—
DEFERRED INCOME TAXES	490	(23)(1) 72 (2) (14)(4) 14 (5) (131)(6) (103)(11)	305
POSTRETIREMENT BENEFITS	256	(1)(6)	255
DEFERRED CREDITS AND OTHER LIABILITIES	668	(8)(4) (10)(6) (41)(9) (4)(11)	605
COMMITMENTS AND CONTINGENCIES			
MINORITY INTEREST	19		19
PREFERRED STOCK WITH MANDATORY REDEMPTION			
PROVISIONS	111		111
COMBINED EQUITY	(1,171)	5 (2) 43 (3) (149)(4) 22 (5) (248)(6) 40 (7) 4 (8) (20)(9) (40)(10) 107 (11) 3,949 (12)	2,542
	<u>(1,171)</u>	<u>3,713</u>	<u>2,542</u>
	<u>\$6,036</u>	<u>\$ (1,418)</u>	<u>\$4,618</u>

ENERGY BUSINESS

NOTES TO PRO FORMA BALANCE SHEET

Pro forma adjustments to reflect certain events that will occur prior to the Effective Time:

- (1) Tentative settlement of a note receivable and tax issues with ICH, a company in bankruptcy.
- (2) Allocation of settlement of tax issues with the Internal Revenue Service.
- (3) Capitalize or settle affiliated accounts receivable and accounts payable.
- (4) Reflect the reacquisition by the Automotive/Packaging businesses of trade accounts receivable from Tenneco Credit Corp. and the retirement of Tenneco Credit Corp. debt.
- (5) Transfer the Energy Business' computer hardware and share of software development costs held by Tenneco Business Services.
- (6) Reflect the assumption by the Automotive/Packaging businesses of responsibility for the Tenneco Retirement Plan.
- (7) Move the Energy Business' portion of state income tax receivable to the Energy Business.
- (8) Move the Energy Business' portion of prepaid insurance to the Energy Business.
- (9) Record dividend by Eastern Insurance of \$20 million and transfer of Eastern's assets and liabilities related to the Automotive/Packaging businesses.
- (10) Transfer Corporate Aviation assets and certain furniture, fixtures and equipment to the Automotive/Packaging businesses.
- (11) Transfer of "other reserves" and recorded pre-distribution income tax assets and liabilities in accordance with the Tax Sharing Agreement.
- (12) Reflect tender for all Tenneco debt and dividend of all cash in excess of \$25 million.

**EXHIBIT G TO
AMENDED AND RESTATED AGREEMENT AND PLAN OF MERGER**

Certain Permitted Actions, Transactions and Other Matters

1. Tenneco may take the actions referred to in the letters, consents, agreements and documents (collectively, the "Letter Agreements") referred to in Schedule G-1 attached hereto to the extent provided therein, and all the terms of all such Letter Agreements are hereby ratified and affirmed (it being understood, however, that (i) the allocation of any cash proceeds therefrom or other "economic" effects thereof shall be governed by the terms of the Debt and Cash Allocation Agreement, and (ii) the failure to include any letter agreement or the like fully executed and delivered between the parties, does *not* mean that same is not effective).

2. On November 29, 1996 (the last business day of the month), the Energy Group will factor to ASCC sufficient receivables to generate Factored Proceeds in an amount not to exceed \$100,000,000. It is understood that under the factoring arrangement Tenneco pledges its accounts receivable to ASCC, and upon payment in full of amounts owed to ASCC under the factoring arrangement, ASCC has no further claim against any pledged accounts receivable. No other pledge or sale of accounts receivable by Tenneco or any of its subsidiaries prior to the Effective Time shall be permitted. This paragraph will be appropriately revised should the date of Closing not occur in December 1996. For additional information see the Debt and Cash Allocation Agreement. All other receivables, and all accounts payable, may only be collected, or paid, as the case may be, in the ordinary course of business, consistent with past practices.

3. The Energy Group may provide to employees of the Energy Group merit pay increases, promotional pay increases and salary adjustments in the ordinary course of business consistent with past practices.

4. The Energy Group may make payments prior to the Merger to its non-executive employees pursuant to its 1996 Tenneco Energy Success Sharing Plan consistent with past practices.

5. The Energy Group may make payments prior to the Merger to executive employees of the Energy Group pursuant to the Tenneco Inc. Executive Incentive Compensation Plan consistent with past practices.

6. Tenneco may make payments prior to the Merger to its executive employees pursuant to the Tenneco Inc. Executive Incentive Compensation Plan as determined by the management of Tenneco consistent with past practices.

7. Tenneco and the Energy Group may pay 1996 year-end bonuses to executives and other employees of the Energy Business as determined by Tenneco prior to the Effective Time with the consent of Acquiror which shall not be unreasonably withheld.

8. Tenneco may take the actions described in Section 6.15 of the Agreement to which this Exhibit G is attached.

9. Except for *Tenneco Power Generation Co. v. City of College Station, et al.*, and any other action, claim, suit or proceeding between or involving Tenneco or any of its subsidiaries and Texas A&M University or the City of College Station, which are not to be settled prior to Closing, all cash proceeds received prior to Closing (i) from the settlement of any or all of the cases identified in Exhibit G-2 shall be for the account of the Industrial Subsidiary to a maximum amount of \$10,500,000, and (ii) from collection actions which may be initiated and settled after the date hereof and prior to the Effective Time, shall be for the account of the Industrial Subsidiary to a maximum amount of \$5,000,000. Any such case (including collection cases) not settled by October 18, 1996 shall be settled only with the consent of Acquiror, which consent is not to be arbitrarily withheld.

10. Tenneco has (or may) sell its interests in the Iroquois Pipeline (the cash proceeds from which were (or will be) added to the general cash funds of Tenneco and will be allocated between the parties in accordance with other cash of Tenneco as of the Closing in accordance with the Debt and Cash Allocation Agreement.

11. Any receivables of Case Corporation (and/or its affiliates) or the Industrial Group held by Tenneco or any of its subsidiaries may be sold for cash and the cash will be added to the general cash funds of Tenneco and allocated between the parties in accordance with other cash of Tenneco as of the Closing in accordance with the Debt and Cash Allocation Agreement.

12. Tenneco and its subsidiaries may, with the consent of Acquiror, take actions and enter into agreements and transactions to monetize Tenneco Ventures, Tenneco's investment in Australia and Tenneco's interest in the Orange Cogeneration Facility.

**SCHEDULE G-1 TO EXHIBIT G
TO AGREEMENT AND PLAN OF MERGER**

1. July 8, 1996 agreement to invest in 70 MW Dunaferr power project in Hungary
2. September 19, 1996 agreement to reimburse amounts expended by Tenneco relating to the 70 MW Dunaferr power project in Hungary and to indemnify Tenneco against losses related to the project
3. July 17, 1996 consent to the disposition of certain private operational-fixed microwave licenses used by Tenneco Communications Corporation on frequencies 1,850 to 1,990 MHz
4. July 31, 1996 blanket consent to the disposition of certain private microwave licenses
5. August 8, 1996 consent to sale of 960-acre parcel of land located along Galveston Bay at Ingleside
6. August 28, 1996 consent to sale of Post Oak Ranch
7. August 28, 1996 consent to sale of Westchase Development property, Tract 6A
8. September 12, 1996 consent to sale of certain gas turbines
9. September 13, 1996 consent to Additional Retention Agreements
10. October 14, 1996 blanket consent to disposition of certain real estate.
11. September 24, 1996 consent to settlement of ICH tax indemnity issue
12. September 24, 1996 letter returning consents to settlement of three lawsuits involving discontinued operations
13. August 19, 1996 letter consenting to customer rate refunds.

EXHIBIT G-2

Case Name

TGP v. Conoco (Grand Chenier)(1)

TGP v. Tidewater(1)

TGP v. South Oak Production(2)

TGP v. SIFCO Forge Group(2)

Land Ventures, Inc. v. Port Camelot(2)

Altamont Gas Transmission Co. v. Express Pipeline, Inc. (Arbitration award)(1)

TGP v. Rowan Companies, Inc. & the D/B Rowan Odessa(3)

TGP v. KES Pepperell and HCE Pepperell, Inc.(3)

Western American Specialized Transportation Services, Inc. v. United States Fire Insurance Company (Tenneco Energy, Inc. as Intervenor)(3)

Tenneco Power Generation Co. v. City of College Station, et al.(4)

- (1) Settled but cash not yet received.
- (2) Settled and cash received.
- (3) Not yet settled.
- (4) Not yet settled and not to be settled prior to closing.

**EXHIBIT H TO
AGREEMENT AND PLAN OF MERGER**

Section 14.

(a) *General.* The Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any contemplated, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, administrative hearing or any other proceeding, whether civil, criminal, administrative or investigative ("Proceeding") (other than a Proceeding by or in the right of the Corporation to procure a judgment in its favor) in whole or in part attributable to (i) the fact that he is or was a director or officer of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, employee benefit plan, trust or other enterprise ("Indemnitee"), or (ii) anything done or not done by such Indemnitee in any such capacity, against expenses (including attorneys' fees) and losses, claims, liabilities, judgments, fines and amounts paid in settlement incurred by him or on his behalf in connection with such Proceeding ("Losses") if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal Proceeding, had no reasonable cause to believe his conduct was unlawful; *provided, however*, that except as provided in Section 14(f) of this Article IV, the Corporation shall indemnify any such Indemnitee in connection with a Proceeding initiated by such Indemnitee only if such Proceeding was authorized by the Board of Directors.

(b) *Actions by or in the Right of the Corporation.* The Corporation shall indemnify any person who was or is made a party or is threatened to be made a party to any pending, completed or threatened Proceeding brought by or in the right of the Corporation to procure a judgment in its favor in whole or in part attributable to (i) the fact that he is or was a director or officer of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise (also an "Indemnitee") or (ii) anything done or not done by such Indemnitee in any such capacity, against expenses (including attorneys' fees) actually incurred by him or on his behalf in connection with such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Corporation, provided that no such indemnification shall be made in respect of any claim, issue or matter as to which Delaware law expressly prohibits such indemnification by reason of an adjudication of liability of such person to the Corporation unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine such indemnification to be equitable under the circumstances.

(c) *Indemnification in Certain Cases.* Notwithstanding any other provision of this Section 14, to the extent that an Indemnitee has been wholly successful on the merits or otherwise in defense of any Proceeding referred to in Sections 14(a) or 14(b) of this Article IV or in defense of any claim, issue or matter therein, he shall be indemnified against expenses (including attorneys' fees) incurred by him or on his behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Corporation shall indemnify Indemnitee, to the maximum extent permitted by law, against expenses (including attorneys' fees) actually incurred by Indemnitee in connection with each successfully resolved claim, issue or matter. For purposes of this Section 14(c) and without limitation, the termination of any such claim, issue or matter by dismissal with or without prejudice shall be deemed to be a successful resolution as to such claim, issue or matter.

(d) *Procedure.* (i) Any indemnification under Sections 14(a) and 14(b) of this Article IV (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the Indemnitee is proper (except that the right of Indemnitee to receive payments pursuant to Section 14(e) of this Article IV shall not be subject to this Section 14(d)) in the circumstances because he has met the applicable standard of conduct set forth in such Sections 14(a) and 14(b), as applicable. When seeking indemnification, Indemnitee shall submit a written request for indemnification to the Corporation. Such requests shall include documentation or information which is necessary for the Corporation to make a determination of Indemnitee's entitlement to indemnification and what is reasonably available to Indemnitee. Such determination

shall be made promptly, but in no event later than 30 days after receipt by the Corporation of Indemnitee's written request for indemnification. The Secretary of the Corporation shall, promptly upon receipt of Indemnitee's request for indemnification, advise the Board of Directors that Indemnitee has made such request for indemnification.

(ii) The entitlement of Indemnitee to indemnification shall be determined in the specific case by a majority vote of the directors who are Disinterested Directors, even though less than a quorum, except that such determination shall be made by Independent Legal Counsel, if either there are no Disinterested Directors or a majority of such Disinterested Directors so directs.

(iii) In the event the determination of entitlement is to be made by Independent Legal Counsel, such Independent Legal Counsel shall be selected by the Board of Directors and approved by Indemnitee. Upon failure of the Board of Directors to so select such Independent Legal Counsel or upon failure of Indemnitee to so approve, such Independent Legal Counsel shall be selected by the Chancellor of the State of Delaware or such other person as such Chancellor shall designate to make such selection.

(iv) If the Board of Directors or Independent Legal Counsel shall have determined that Indemnitee is not entitled to indemnification to the full extent of Indemnitee's request, Indemnitee shall have the right to seek entitlement to indemnification in accordance with the procedures set forth in Section 14(f) of this Article IV.

(v) If the person or persons empowered pursuant to Section 14(d)(ii) of this Article IV to make a determination with respect to entitlement to indemnification shall have failed to make the requested determination within 90 days after receipt by the Corporation of such request, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be absolutely entitled to such indemnification, absent (A) misrepresentation by Indemnitee of a material fact in the request for indemnification or (B) a final judicial determination that all or any part of such indemnification is expressly prohibited by law.

(vi) The termination of any Proceeding by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not, of itself, adversely affect the rights of Indemnitee to indemnification hereunder except as may be specifically provided herein, or create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation or create a presumption that (with respect to any criminal action or proceeding) Indemnitee had reasonable cause to believe that Indemnitee's conduct was unlawful.

(vii) For purposes of any determination of good faith hereunder, Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Corporation or an Affiliate, including financial statements, or on information supplied to Indemnitee by the officers of the Corporation or an Affiliate in the course of their duties, or on the advice of legal counsel for the Corporation or an Affiliate or by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Corporation or an Affiliate. The provisions of this Section 14(d)(vii) of this Article IV shall not be deemed to be exclusive or to limit in any way the other circumstances in which the Indemnitee may be deemed to have met the applicable standard of conduct set forth in these By-Laws.

(viii) The knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Corporation or an Affiliate shall not be imputed to Indemnitee for purposes of determining the right to indemnification under these By-Laws.

(ix) Without limiting the generality of the foregoing, in the event any Indemnitee is made a party or is threatened to be made a party to any Proceeding:

(A) the Indemnitee may retain counsel satisfactory to him with the consent of the Corporation, which may not be unreasonably withheld or delayed;

(B) the Corporation shall pay all fees and expenses of such counsel for the Indemnitee promptly as statements therefor are received; and

(C) the Corporation will use all reasonable efforts to assist in the vigorous defense of any such matter, provided that the Corporation shall not be liable for any settlement effected without its written consent, which consent, however, shall not be unreasonably withheld.

Any Indemnitee wishing to claim indemnification under this Section 14, upon notice that such person has been made or is threatened to be made a party to any such Proceeding, shall notify the Corporation (but any failure so to notify shall not relieve the Corporation from any liability which it may have under this Section 14, except to the extent such failure materially prejudices the Corporation) and shall deliver to the Corporation any undertaking required by Section 145(e) of the DGCL. The Indemnitees as a group may retain only one law firm to represent them with respect to each such Proceeding unless there is, under applicable standards of professional conduct, a conflict on any significant issue between the positions of any two or more Indemnitees.

(e) *Advances for Expenses and Costs.* All expenses (including attorneys' fees) incurred by or on behalf of Indemnitee (or reasonably expected by Indemnitee to be incurred by Indemnitee within three months) in connection with any Proceeding shall be paid by the Corporation in advance of the final disposition of such Proceeding within 20 days after the receipt by the Corporation of a statement or statements from Indemnitee requesting from time to time such advance or advances whether or not a determination to indemnify has been made under Section 14(d) of this Article IV (and even if the Disinterested Directors or Independent Legal Counsel has determined, pursuant to Section 14(d), that Indemnitee is not entitled to indemnification by reason of their conclusions that Indemnitee (i) did not act in good faith or in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Corporation or (ii) had reasonable cause to believe his conduct was unlawful, but not after the conclusion of judicial proceedings under Section 14(f)). Indemnitee's entitlement to such advancement of expenses shall include those incurred in connection with any Proceeding by Indemnitee seeking an adjudication or award in arbitration pursuant to these By-Laws. Such statement or statements shall evidence such expenses incurred (or reasonably expected to be incurred) by Indemnitee in connection therewith and shall include or be accompanied by a written undertaking by or on behalf of Indemnitee to repay such amount if it shall ultimately be determined that Indemnitee is not entitled to be indemnified therefor pursuant to the terms of this Section 14(e) of Article IV. The financial ability of an Indemnitee to repay an advance shall not be a prerequisite to the making of such an advance.

(f) *Remedies in Cases of Determination not to Indemnify or to Advance Expenses.* (i) In the event that (A) a determination is made that Indemnitee is not entitled to indemnification hereunder, (B) advances are not made pursuant to Section 14(e) of this Article IV or (C) payment has not been timely made following a determination of entitlement to indemnification pursuant to Section 14(d) of this Article IV, Indemnitee shall be entitled to seek a final adjudication in an appropriate court of the State of Delaware or any other court of competent jurisdiction of Indemnitee's entitlement to such indemnification or advance.

(ii) In the event a determination has been made in accordance with the procedures set forth in Section 14(d) of this Article IV, in whole or in part, that Indemnitee is not entitled to indemnification, any judicial proceeding referred to in paragraph (i) of this Section 14(f) shall be *de novo* and Indemnitee shall not be prejudiced by reason of any such prior determination that Indemnitee is not entitled to indemnification.

(iii) If a determination is made or deemed to have been made pursuant to the terms of Sections 14(d) or (f) of this Article IV that Indemnitee is entitled to indemnification, the Corporation shall be bound by such determination in any judicial proceeding in the absence of (A) a misrepresentation of a material fact by Indemnitee or (B) a final judicial determination that all or any part of such indemnification is expressly prohibited by law.

(iv) To the extent deemed appropriate by the court, interest shall be paid by the Corporation to Indemnitee at a reasonable interest rate for amounts which the Corporation indemnifies or is obliged to indemnify Indemnitee

for the period commencing with the date on which Indemnitee requested indemnification (or reimbursement or advance of expenses) and ending with the date on which such payment is made to Indemnitee by the Corporation.

(g) *Rights Non-Exclusive.* The rights of indemnification and advancement of expenses provided by, or granted pursuant to, this Section 14 of Article IV shall not be deemed exclusive of any rights to which any person seeking indemnification or advancement of expenses may be entitled under any law, certificate of incorporation, by-law, agreement, vote of stockholders or resolution of directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding such office. No amendment, alteration, rescission or replacement of these By-Laws or any provision hereof shall be effective as to Indemnitee with respect to any action taken or omitted by such Indemnitee in Indemnitee's position with the Corporation or an Affiliate or any other entity which Indemnitee is or was serving at the request of the Corporation prior to such amendment, alteration, rescission or replacement.

(h) *Insurance.* The Corporation shall have power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him and incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify him against such liability under the provisions of this Section 14 of Article IV.

(i) *Surviving of Rights.* The indemnification and advancement of expenses provided by, or granted pursuant to this Section 14 of Article IV shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(j) *Indemnification of Employees and Agents of the Corporation.* The Corporation may, by action of the Board of Directors from time to time, grant rights to indemnification and advancement of expenses to employees and agents of the Corporation, with the same scope and effect as the provisions of this Section 14 of Article IV with respect to the indemnification of directors and officers of the Corporation.

(k) *Definitions.* For purposes of this Section 14:

(a) "Affiliate" includes any corporation, partnership, joint venture, employee benefit plan, trust or other enterprise directly or indirectly owned by the Corporation.

(b) "Corporation" includes all constituent corporations absorbed in a consolidation or merger as well as the resulting or surviving corporation so that any person who is or was a director, officer, employee or agent of such a constituent corporation or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise shall stand in the same position under the provisions of this Article IV with respect to the resulting or surviving corporation as he would if he had served the resulting or surviving corporation in the same capacity.

(c) "Disinterested Director" shall mean a director of the Corporation who is not or was not a party to the Proceeding in respect of which indemnification is being sought by Indemnitee.

(d) "Independent Legal Counsel" shall mean a law firm or lawyer that neither is presently nor in the past five years has been retained to represent: (i) the Corporation or Indemnitee in any matter material to either such party or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any firm or person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Corporation or Indemnitee in an action to determine Indemnitee's right to indemnification under these By-Laws. All fees and expenses of the Independent Counsel incurred in connection with acting pursuant to these By-Laws shall be borne by the Corporation.

**EXHIBIT I TO
AGREEMENT AND PLAN OF MERGER**

Certain Deferred Intercompany Gains

- The deferred gain created as a result of the transfer of the assets and business of Newport News Industrial Corporation and Newport News Industrial Corporation of America to Tenneco InterAmerica Inc.
- Any deferred gain created as a result of the transfer of any assets to Industrial Subsidiary as contemplated by the Corporate Transaction Steps as defined in the Distribution Agreement.

**EXHIBIT J TO
AGREEMENT AND PLAN OF MERGER**

Representations in Connection with IRS Ruling Letter

A. Tenneco Representations

Pursuant to Section 6.6(a) of the Agreement, Tenneco will use its reasonable best efforts to deliver, in connection with the IRS Ruling Letter, letters of representation reasonable under the circumstances as to its present intentions and present knowledge including the following representations:

- (a) Tenneco will pay its own expenses, if any, in connection with the Merger.
- (b) There is no plan or intention by the Tenneco Stockholders who own five percent or more of the Tenneco Stock, and to the best of the knowledge of the management of Tenneco, there is no plan or intention on the part of the remaining Tenneco Stockholders to sell, exchange, or otherwise dispose of a number of shares of Acquiror Stock received in the transaction that would reduce the Tenneco Stockholders' ownership of Acquiror Stock to a number of shares having a value, as of the Closing Date, of less than 50% of the value of all of the formerly outstanding Tenneco Stock as of the Closing Date. For purposes of this representation, shares of Tenneco Stock surrendered by dissenters or exchanged for cash in lieu of fractional shares of Acquiror Stock will be treated as outstanding Tenneco Stock on the Closing Date. Moreover, shares of Tenneco Stock and shares of Acquiror Stock held by Tenneco Stockholders and otherwise sold, redeemed or disposed of prior or subsequent to the Closing Date will be considered in making this representation.
- (c) The fair market value of the Acquiror Stock received by each of the Tenneco Stockholders will be approximately equal to the fair market value of the Tenneco Stock surrendered in the Merger.
- (d) Tenneco has no plan or intention to issue additional shares of capital stock that would result in Acquiror losing control of Tenneco within the meaning of Section 368(c)(1) of the Code.
- (e) At the time of the Merger, Tenneco will not have outstanding any warrants, options, convertible securities, or any other type of right pursuant to which any Person could acquire stock in Tenneco that, if exercised or converted, would affect Acquiror's acquisition or retention of control of Tenneco, as defined in Section 368(c)(1) of the Code.
- (f) Tenneco is not an investment company as defined in Section 368(a)(2)(F)(iii) and (iv) of the Code.
- (g) Tenneco will pay to its stockholders who are entitled to demand, and who properly demand and perfect, appraisal rights under the DGCL the fair value of their Tenneco Stock as determined by the Delaware courts out of its own funds. No funds will be supplied for that purpose, directly or indirectly, by Acquiror, nor will Acquiror directly or indirectly reimburse Tenneco for any payments to dissenters.
- (h) On the date of the Merger, the fair market value of the assets of Tenneco will exceed the sum of its liabilities plus the liabilities, if any, to which Tenneco's assets are subject.
- (i) The payment of cash in lieu of fractional shares of Acquiror Stocks is solely for the purpose of avoiding the expense and inconvenience to Acquiror of issuing fractional shares and does not represent separately bargained-for consideration. The total cash consideration that will be paid in the transaction to the Tenneco stockholders instead of issuing fractional shares of Acquiror Stock will not exceed one percent of the total consideration that will be issued in the transaction to the Tenneco stockholders in exchange for their shares of Tenneco Stock. The total share interests of each stockholder will be aggregated, and no stockholder will receive cash in an amount greater to or greater than the value of one full share of Acquiror Stock.

B. Acquiror and Subsidiary Representations

Pursuant to Section 6.6(b) of the Agreement, each of Acquiror and Subsidiary will use its reasonable best efforts to deliver, in connection with the IRS Ruling Letter, letters of representation reasonable under the circumstances as to its present intentions and present knowledge including the following representations:

(a) Acquiror has no present plan or intention to liquidate Tenneco, to merge Tenneco into another corporation, to cause Tenneco to sell or otherwise dispose of its assets (other than certain assets unrelated to Tenneco's interstate gas pipeline and natural gas marketing businesses), or to sell or otherwise dispose of any Tenneco Stock acquired in the Merger, except for transfers described in Section 368(a)(2)(C) of the Code.

(b) Acquiror has no plan or intention to reacquire any shares of Acquiror Stock issued to Tenneco stockholders in the Merger.

(c) Acquiror will pay its expenses, if any, incurred in connection with the Merger.

(d) Acquiror will acquire the Tenneco Stock in exchange for voting capital stock of Acquiror pursuant to Section 2.5 of the Merger Agreement. For purposes of this representation, Tenneco Stock redeemed for cash or other property furnished by Acquiror will be considered as acquired by Acquiror. Further, no liabilities of Tenneco or the Tenneco stockholders will be assumed by Acquiror, nor will any of the Tenneco Stock be subject to any liabilities.

(e) Acquiror does not presently own, directly or indirectly, nor has it owned during the past five years, directly or indirectly, any capital stock of Tenneco.

(f) Immediately following the Merger, Acquiror will continue Tenneco's Energy Business or use a significant portion of the assets of Tenneco's Energy Business in a business.

(g) Acquiror is not an investment company as defined in Section 368(a)(2)(F)(iii) and (iv) of the Code.

(h) Immediately after the Merger, Acquiror will be in control of Tenneco within the meaning of Section 368(c) of the Code.

**EXHIBIT K TO
AGREEMENT AND PLAN OF MERGER**

Benefits for Employees of the Energy Business

After the Effective Time,

- (i) Acquiror shall cause Tenneco to perform its obligations under the Benefits Agreement.
- (ii) Acquiror shall provide, or shall cause its subsidiaries (including Tenneco) to provide, the severance benefits described on Annex I hereto to employees of the Energy Business whose employment with Tenneco and its Affiliates (including Acquiror and its Affiliates) is terminated within one year after the Effective Time for any reason other than (A) death, (B) disability, (C) voluntary termination by the employee, other than with respect to EICP Employees upon a substantial reduction in compensation or substantial diminishment of job responsibilities or (D) for cause. A termination of employment for cause with respect to EICP Employees shall not include a termination of employment due to a refusal to accept a relocation of such employment to a location that is more than 50 miles from the location of such employment immediately prior to the Effective Time;
- (iii) Acquiror shall cause to be provided to (A) former employees of Tenneco currently eligible for retiree medical and life benefits, (B) current employees of Tenneco who (i) would be eligible to receive such benefits if they retired as of the Effective Time and (ii) retire within six months following the Effective Time (or such longer period designated by Acquiror) and (C) the dependents of the current and former employees described in clause (A) and (B) the retiree medical and life benefits as in effect immediately prior to the Effective Time for a period of at least ten years from the Effective Time; provided, however, that nothing herein shall be construed to prohibit changes to the retiree medical plan (to the extent otherwise permitted under the documents governing the benefits), to implement appropriate cost containment features and other methods of providing comparable benefits;
- (iv) Acquiror shall cause to be provided the benefits under the Tenneco Energy Retention Programs as described on Annex II hereto;
- (v) Acquiror shall timely pay or cause to be timely paid to each employee of the Energy Business whose employment is terminated within one year after the Effective Time an amount equal to his or her earned but unused 1996 and 1997 vacation pay (in accordance with Tenneco Energy's current vacation policy).
- (vi) Acquiror shall provide to each employee of the Energy Business whose employment is involuntarily terminated within one year after the Effective Time outplacement services as follows:
 - (A) for officer and director-level employees of the Energy Business, up to 12 months of counseling services by either Right and Associates or King Chapman Broussard; and
 - (B) for other employees of the Energy Business, up to three months of counseling services by Lee Hecht Harrison.
- (vii) Employees of the Energy Business will receive credit for Past Service (as hereinafter defined) in determining vacation entitlement under the applicable vacation policy of Acquiror and its subsidiaries. "Past Service" means (A) service as an employee of Tenneco or any of its Affiliates and (ii) service as an employee of any other entity, but only to the extent that such service is recognized under the applicable plan of Acquiror and is continuous through the Closing Date.
- (viii) For a period extending to December 31, 1997, employees of the Energy Business shall receive benefits which in the aggregate are substantially equivalent to the benefits received by similarly situated employees of Acquiror (other than pursuant to the Acquiror's employee and executive severance plans).
- (ix) Acquiror shall give credit for Past Service for purposes of (i) determining eligibility for initial participation in the plans or arrangements maintained by Acquiror and its Affiliates, (ii) determining the

duration and amount, if any, of short-term disability benefits due and (iii) vesting (including, without limitation, eligibility for early retirement) under such plans.

(x) No preexisting condition, exclusion or limitation shall be applicable with respect to the participation of an employee of the Energy Business in any medical benefit plan of Acquiror or any of its Affiliates. Welfare plans will credit amounts already expended in the year in which the Merger occurs towards deductibles, out-of-pocket limits and similar provisions for such year.

(xi) Acquiror shall satisfy, or shall cause the Surviving Corporation or one of its subsidiaries to satisfy, the obligations owed by Tenneco or its subsidiaries to (i) Wilton Scott, former Chairman of the Board of Directors of Tenneco, in accordance with past practices, and (ii) J. L. Ketelsen, former Chairman of the Board of Directors of Tenneco, set forth in the Letter Agreement dated December 13, 1991 from Joseph J. Sisco to J. L. Ketelsen.

(xii) Acquiror shall satisfy, or shall cause the Surviving Corporation or one of its subsidiaries to satisfy, the obligations owed by Tenneco or its subsidiaries to Edward Casey, Peter Menikoff and Donald Sinclair, set forth in the following documents:

1. Letter dated November 1, 1995, from Barry R. Schuman to Edward J. Casey, Jr.
2. Letter dated May 12, 1994, from Dana G. Mead to Peter Menikoff; Memorandum dated December 13, 1994, from Barry Schuman to Peter Menikoff.
3. Letter dated April 15, 1996, from Edward J. Casey, Jr. to Donald R. Sinclair.

**Annex I
to Exhibit K to
Agreement and Plan of Merger**

Severance Benefits

EICP Employees

In the event of a sale, approximately 50 high-level employees are covered by Tenneco Energy's current Executive Incentive Compensation Program (EICP). The non-ERISA severance program for EICP employees is based on position. Under this current program, in the event of an acquisition of Tenneco Energy, Tenneco shall pay to eligible employees severance benefits generally ranging from 12 months of base pay to 24 months of base pay on the following formula:

<u>Level</u>	<u>Months of Pay</u>
1	12
2	18
3 and above	24

Employees otherwise eligible for severance benefits pursuant to this program and pursuant to any employment agreement shall receive the greater of the above severance benefits or the benefits provided under the employment agreement.

In addition, if an eligible employee is enrolled in medical or dental plans when separated, Tenneco shall provide health care coverage on an optional basis with the costs shared by the employee being the same as for similarly situated active employees for a period equal to the months of pay received as severance, up to 12 months. At the end of such period, the employee shall be entitled to COBRA coverage and the applicable COBRA coverage period shall not be reduced by the period of the optional continued coverage.

Acquiror shall maintain the current severance benefits for at least one year from the Effective Time.

Severance Benefits

Non-ETCP Employees

In the event of a sale, approximately 3200 employees are covered by Tenneco Energy's current non-ERISA severance program, based on three factors: 1) years of service; 2) age; and 3) position. Under this program, in the event of an acquisition of Tenneco Energy, Tenneco shall pay to eligible employees severance benefits ranging from 6 weeks to 52 weeks of base pay based on the following formula:

- (A) 2 weeks base pay per year or partial year of service, plus
- (B) a number of weeks of base pay according to employee age at termination

40 to 44(4)
45 to 49(6)
50 to 54(8)
55 to 59(10)
60+(12), plus

- (C) a number of weeks base pay according to position level

Grade 09(1)	15(7)
10(2)	16(8)
11(3)	17(9)
12(4)	18(10)
13(5)	
14(6)	

Employees otherwise eligible for severance benefits pursuant to this program and pursuant to any employment agreement shall receive the greater of the above severance benefits or the benefits provided under the employment agreement.

In addition, if an eligible employee is enrolled in medical or dental plans when separated, Tenneco shall provide health care coverage on an optional basis with the costs shared by the employee being the same as for similarly situated active employees for a period equal to the months of pay received as severance, up to 12 months. At the end of such period, the employee shall be entitled to COBRA coverage and the applicable COBRA coverage period shall not be reduced by the period of the optional continued coverage.

Acquiror shall maintain the current severance benefits for at least one year from the Effective Time.

Tenneco Energy Retention Programs

To insure that certain Tenneco Energy employees continue to devote appropriate time and effort toward managing the enterprise, Tenneco has implemented an Executive Retention Program. Under the Program, cash awards are provided to "Key Employees" who are instrumental in the operation and who continue with Tenneco during this critical transition.

The retention payments are to be paid to designated Key Employees only if *all* of the following conditions are met:

- The acquisition by a third party of Tenneco Energy by a merger or otherwise (collectively a "Sale") occur no later than March 31, 1997.
- The Key Employee remains a full-time, active employee of Tenneco Energy on the date of the Sale (unless earlier terminated at the request of Acquiror).
- The Key Employee cooperates fully with Tenneco in the efforts to sell Tenneco and complies with all terms and conditions of employment required of all full-time employees.

The retention payments will be payable with 30 days following the completion of the sale and upon execution of releases.

The cost of the Executive Retention Program is approximately \$9 million and will be the obligation of Tenneco (to be paid after it has been acquired by Acquiror).

Additionally, a separate retention program will be implemented for approximately 200 lower management and staff level employees. Conditions for the program are similar to those set forth above, and the resulting costs are approximately \$4 million (or such higher amount if instructed by Acquiror). Consistent with the Executive Retention Program, all costs would be the obligation of Tenneco (to be paid after it has been acquired by Acquiror).

**EXHIBIT L TO
AGREEMENT AND PLAN OF MERGER**

GUARANTY

This Guaranty (the "Guaranty") dated as of _____, by the undersigned, El Paso Natural Gas Company, a Delaware corporation ("Guarantor"), in favor of _____, a Delaware corporation ("Industrial Company"), has reference to the following facts and circumstances:

A. Guarantor owns 100% of the issued and outstanding capital stock of _____, a Delaware corporation ("Acquiror Subsidiary");

B. Guarantor, Acquiror Subsidiary and Tenneco Inc., a Delaware corporation ("Tenneco") have entered into that certain Agreement and Plan of Merger, dated as of _____, 1996 ("the Merger Agreement"), pursuant to which, subject to the terms and conditions contained therein, Acquiror Subsidiary will be merged with and into Tenneco, with Tenneco continuing as the surviving corporation of the merger (the "Surviving Corporation") and a wholly-owned subsidiary of Guarantor;

C. In connection with the transactions contemplated by the Merger Agreement, Tenneco, Industrial Company and _____, a Delaware corporation (Shipbuilding Company"), have entered into that certain Distribution Agreement, dated as of _____, 1996 (together with all exhibits, schedules and attachments thereto, the "Distribution Agreement"), pursuant to which, subject to the terms and conditions contained therein, (i) Tenneco and its subsidiaries will restructure, divide and separate their existing businesses and assets so that (a) the Industrial Assets and Industrial Business (as such terms are defined in the Distribution Agreement) shall be owned, directly and indirectly, by the Industrial Company, and (b) the Shipbuilding Assets and Shipbuilding Business (as such terms are defined in the Distribution Agreement) shall be owned, directly and indirectly by the Shipbuilding Company, and (ii) Tenneco shall distribute all of the outstanding capital stock of Industrial Company and Shipbuilding Company as a dividend to the holders of shares of the common stock, par value \$5.00 per share, of Tenneco;

D. Guarantor deems it to be in its best interests to enter into this Guaranty in order to guarantee the payment and performance of the obligations of Tenneco, Surviving Corporation and the Energy Subsidiaries arising under the Transaction Documents (as hereinafter defined); and

E. Tenneco, as a condition precedent to consummation of the transactions contemplated by the Merger Agreement, requires that Guarantor execute and deliver this Guaranty.

NOW, THEREFORE, in consideration of the foregoing, Guarantor agrees as follows:

1. DEFINITIONS.

- (a) "Effective Time" has the meaning set forth in the Merger Agreement.
- (b) "Energy Subsidiaries" has the meaning set forth in the Merger Agreement.
- (c) "Guarantor's Liabilities" means all of Guarantor's obligations and liabilities to Industrial Company under this Guaranty
- (d) "Person" has the meaning set forth in the Merger Agreement.
- (e) "Tenneco Liabilities" has the meaning set forth in Section 2 hereof.
- (f) "Transaction Documents" means the Merger Agreement and the Distribution Agreement (including, without limitation, the Tax Sharing Agreement included as an exhibit to the Distribution Agreement).

2. GUARANTY.

In consideration of the foregoing, from and after the Effective Time Guarantor unconditionally, absolutely, continuingly and irrevocably guarantees, as a primary obligor and not a surety, to Industrial Company the timely payment and performance by Tenneco, Surviving Corporation and/or the Energy Subsidiaries of all of their respective covenants, agreements, obligations and liabilities arising under or pursuant to the Transaction Documents (or any of them) (collectively, the "Tenneco Liabilities").

As a condition to payment or performance of Guarantor's Liabilities, Industrial Company is not required to prosecute collection or seek to enforce or resort to any remedies against Tenneco, Surviving Corporation or any of the Energy Subsidiaries or any other Person liable to Industrial Company on account of Tenneco Liabilities or any guaranty thereof. Guarantor's Liabilities shall in no way be impaired, affected, reduced or released by reason of (i) Industrial Company's failure or delay to do or take any of the actions or things described in this Guaranty, or (ii) the voluntary or involuntary liquidation, dissolution, sale or other disposition of all or substantially all the assets of Tenneco, Surviving Corporation or any of the Energy Subsidiaries or the marshaling of assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, arrangement, composition with creditors or readjustment of, or other similar proceedings, or any other inability to pay or perform, affecting Tenneco, Surviving Corporation or any of the Energy Subsidiaries, or any of their respective assets, or any allegation concerning, or contest of the legality or validity of, the indemnification obligations under any of the Transaction Documents or this Guaranty in any such proceeding.

3. REPRESENTATIONS AND WARRANTIES.

Guarantor represents and warrants to Industrial Company that:

(a) Guarantor has the legal power, right and authority to execute, deliver and perform this Guaranty, and to consummate the transactions contemplated hereby. All requisite corporate action has been taken by the Guarantor in connection with the execution and delivery of this Guaranty, and the consummation of the transactions contemplated hereby.

(b) This Guaranty has been duly executed and delivered by or on behalf of Guarantor and constitutes the legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms.

(c) None of the execution, delivery and performance by Guarantor of this Guaranty shall, by the lapse of time, the giving of notice or otherwise, constitute a violation of any provision of applicable law, or contained in any agreement, instrument or document to which Guarantor is now or may hereafter become a party or by which Guarantor is or may become bound.

(d) Guarantor is now solvent and generally able to pay its debts as such debts become due.

4. WAIVERS.

(a) Guarantor waives any and all right to assert against Industrial Company any claims or defenses with respect to the legality, validity and/or enforceability of this Guaranty based upon any failure of Industrial Company to furnish to Guarantor any information or facts relating to the ability of any of Tenneco, Surviving Corporation or the Energy Subsidiaries to pay and perform the applicable Tenneco Liabilities.

(b) Guarantor waives all defenses, counterclaims and offsets of any kind or nature, in connection with the legality, validity and/or enforceability of this Guaranty, including, without limitation, any such defenses, counterclaims or offsets arising directly or indirectly from any agreement, instrument or document executed and delivered, by Tenneco, Surviving Corporation or any of the Energy Subsidiaries, or acquired by Industrial Company from Tenneco, Surviving Corporation or any of the Energy Subsidiaries.

(c) Guarantor waives any and all right to assert against Industrial Company any claim or defense based upon any election of remedies by Industrial Company which in any manner impairs, affects, reduces, releases or extinguishes Guarantor's right to proceed against Tenneco, Surviving Corporation or any of the Energy Subsidiaries for reimbursement, or any other rights of Guarantor against Tenneco, Surviving Corporation or any of the Energy Subsidiaries, or against any other Person.

(d) Guarantor hereby waives notice of the following events or occurrences and agrees that Industrial Company may do any or all of the following in such manner, upon such terms and at such times as Industrial Company in its sole discretion deems advisable without in any way impairing, affecting, reducing or releasing Guarantor from Guarantor's Liabilities: (i) Industrial Company's acceptance of this Guaranty; (ii) Industrial Company's heretofore, now or at any time or times hereafter obtaining, releasing, waiving or modifying of any other Person's guaranty of Tenneco Liabilities given to Industrial Company; (iii) the amendment or modification of any of the Transaction Documents, or the waiver or release of any provisions of the Transaction Documents by Industrial Company; (iv) presentment, demand, notices of default, nonpayment, partial payment and protest, and all other notices or formalities to which Guarantor may be entitled; (v) Industrial Company's heretofore, now or at any time or times hereafter granting to Tenneco, Surviving Corporation or any of the Energy Subsidiaries (or any other Person liable to Industrial Company on account of Tenneco Liabilities) of any indulgences or extensions of time of payment of Tenneco Liabilities; and (vi) Industrial Company's heretofore, now or at any time or times hereafter accepting from Tenneco, Surviving Corporation or any of the Energy Subsidiaries or any other Person any partial payment or payments on account of Tenneco Liabilities or Industrial Company's settling, subordinating, compromising, discharging or releasing the same.

5. REMEDIES.

If Guarantor's Liabilities are not paid or performed forthwith by Guarantor to Industrial Company at Industrial Company's principal place of business, Industrial Company may proceed to suit against Guarantor (at Industrial Company's election, one or more successive or concurrent suits may be brought hereunder by Industrial Company against Guarantor, whether suit has been commenced against Tenneco, Surviving Corporation or any of the Energy Subsidiaries and in any such suit Tenneco, Surviving Corporation or any of the Energy Subsidiaries may be joined (but need not be joined) as a party with Guarantor). In addition, Industrial Company may exercise any other right or remedy provided by law.

6. JURISDICTION.

All questions and/or disputes concerning the legality, construction, validity and interpretation of this Guaranty shall be governed by the internal laws, and not the law of conflicts, of the State of Delaware. Guarantor hereby irrevocably and unconditionally agrees to be subject to, and hereby consents and submits to, the jurisdiction of the courts of the State of Delaware and of the Federal courts sitting in the State of Delaware.

7. MISCELLANEOUS.

If any provision of this Guaranty or the application thereof to any party or circumstance is held invalid or unenforceable, the remainder of this Guaranty and the application of such provision to other Persons or circumstances will not be affected thereby, the provisions of this Guaranty being severable in any such instance.

This Guaranty shall continue in full force and effect until all of the Tenneco Liabilities are fully and indefeasibly paid, performed and discharged. This Guaranty shall continue to be effective or be reinstated, as the case may be, if at any time payment of any of Guarantor's Liabilities is rescinded or must otherwise be returned by Industrial Company upon the insolvency, bankruptcy or reorganization of Guarantor, Tenneco, Surviving Corporation or any of the Energy Subsidiaries or otherwise, all as though such payment had not been made. This Guaranty shall be binding upon Guarantor and its successors and assigns and shall inure to the benefit of Industrial Company, its successors and assigns.

All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or mailed by registered or certified mail, return receipt requested, to the parties at the following addresses (until notice of a change thereof is delivered as provided in this paragraph):

Industrial Company:	1275 King Street Greenwich, CT 06831 Attn: Corporate Secretary
Guarantor:	One Paul Kayser Center 100 North Stanton Street El Paso, TX 79901 Attn: William A. Wise Chairman and Chief Executive Officer

Industrial Company's failure at any time hereafter to require strict performance by Guarantor of any provision of this Guaranty shall not waive, effect or diminish any right of Industrial Company thereafter to demand strict compliance and performance therewith.

This Guaranty is in addition to, and not limitation of or substitution for, Guarantor's covenants and obligations under the Transaction Documents (including, without limitation, Guarantor's covenants and obligations under Section 6.18 of the Merger Agreement).

IN WITNESS WHEREOF, Guarantor has executed this Guaranty as of the date first above written.

EL PASO NATURAL GAS COMPANY

By: _____
Title:

GUARANTY

This Guaranty (the "Guaranty") dated as of _____, by the undersigned, El Paso Natural Gas Company, a Delaware corporation ("Guarantor"), in favor of _____, a Delaware corporation ("Shipbuilding Company"), has reference to the following facts and circumstances:

A. Guarantor owns 100% of the issued and outstanding capital stock of _____, a Delaware corporation ("Acquirer Subsidiary");

B. Guarantor, Acquirer Subsidiary and Tenneco Inc., a Delaware corporation ("Tenneco") have entered into that certain Agreement and Plan of Merger, dated as of _____, 1996 ("the Merger Agreement"), pursuant to which, subject to the terms and conditions contained therein, Acquirer Subsidiary will be merged with and into Tenneco, with Tenneco continuing as the surviving corporation of the merger ("Surviving Corporation") and a wholly-owned subsidiary of Guarantor;

C. In connection with the transactions contemplated by the Merger Agreement, Tenneco, Shipbuilding Company and _____, a Delaware corporation ("Industrial Company"), have entered into that certain Distribution Agreement, dated as of _____, 1996 (together with all exhibits, schedules and attachments thereto, the "Distribution Agreement"), pursuant to which, subject to the terms and conditions contained therein, (i) Tenneco and its subsidiaries will restructure, divide and separate their existing businesses and assets so that (a) the Industrial Assets and Industrial Business (as such terms are defined in the Distribution Agreement) shall be owned, directly and indirectly, by the Industrial Company, and (b) the Shipbuilding Assets and Shipbuilding Business (as such terms are defined in the Distribution Agreement) shall be owned, directly and indirectly by the Shipbuilding Company, and (ii) Tenneco shall distribute all of the outstanding capital stock of Industrial Company and Shipbuilding Company as a dividend to the holders of shares of the common stock, par value \$5.00 per share, of Tenneco;

D. Guarantor deems it to be in its best interests to enter into this Guaranty in order to guarantee the payment and performance of the obligations of Tenneco, Surviving Corporation and the Energy Subsidiaries arising under the Transaction Documents (as hereinafter defined); and

E. Tenneco, as a condition precedent to consummation of the transactions contemplated by the Merger Agreement, requires that Guarantor execute and deliver this Guaranty.

NOW, THEREFORE, in consideration of the foregoing, Guarantor agrees as follows:

1. DEFINITIONS.

- (a) "Effective Time" has the meaning set forth in the Merger Agreement.
- (b) "Energy Subsidiaries" has the meaning set forth in the Merger Agreement.
- (c) "Guarantor's Liabilities" means all of Guarantor's obligations and liabilities to Shipbuilding Company under this Guaranty
- (d) "Person" has the meaning set forth in the Merger Agreement.
- (e) "Tenneco Liabilities" has the meaning set forth in Section 2 hereof.
- (f) "Transaction Documents" means the Merger Agreement and the Distribution Agreement (including, without limitation, the Tax Sharing Agreement included as an exhibit to the Distribution Agreement).

2. GUARANTY.

In consideration of the foregoing, from and after the Effective Time Guarantor unconditionally, absolutely, continuingly and irrevocably guarantees, as a primary obligor and not a surety, to Shipbuilding Company the timely payment and performance by Tenneco, Surviving Corporation and/or the Energy Subsidiaries of all of

their respective covenants, agreements, obligations and liabilities arising under or pursuant to the Transaction Documents (or any of them) (collectively, the "Tenneco Liabilities").

As a condition to payment or performance of Guarantor's Liabilities, Shipbuilding Company is not required to prosecute collection or seek to enforce or resort to any remedies against Tenneco, Surviving Corporation or any of the Energy Subsidiaries or any other Person liable to Shipbuilding Company on account of Tenneco Liabilities or any guaranty thereof. Guarantor's Liabilities shall in no way be impaired, affected, reduced or released by reason of (i) Shipbuilding Company's failure or delay to do or take any of the actions or things described in this Guaranty, or (ii) the voluntary or involuntary liquidation, dissolution, sale or other disposition of all or substantially all the assets of Tenneco, Surviving Corporation or any of the Energy Subsidiaries or the marshaling of assets and liabilities, receivership, insolvency, bankruptcy, assignment for the benefit of creditors, reorganization, arrangement, composition with creditors or readjustment of, or other similar proceedings, or any other inability to pay or perform, affecting Tenneco, Surviving Corporation or any of the Energy Subsidiaries, or any of their respective assets, or any allegation concerning, or contest of the legality or validity of, the indemnification obligations under any of the Transaction Documents or this Guaranty in any such proceeding.

3. REPRESENTATIONS AND WARRANTIES.

Guarantor represents and warrants to Shipbuilding Company that:

(a) Guarantor has the legal power, right and authority to execute, deliver and perform this Guaranty, and to consummate the transactions contemplated hereby. All requisite corporate action has been taken by the Guarantor in connection with the execution and delivery of this Guaranty, and the consummation of the transactions contemplated hereby.

(b) This Guaranty has been duly executed and delivered by or on behalf of Guarantor and constitutes the legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms.

(c) None of the execution, delivery and performance by Guarantor of this Guaranty shall, by the lapse of time, the giving of notice or otherwise, constitute a violation of any provision of applicable law, or contained in any agreement, instrument or document to which Guarantor is now or may hereafter become a party or by which Guarantor is or may become bound.

(d) Guarantor is now solvent and generally able to pay its debts as such debts become due.

4. WAIVERS.

(a) Guarantor waives any and all right to assert against Shipbuilding Company any claims or defenses with respect to the legality, validity and/or enforceability of this Guaranty based upon any failure of Shipbuilding Company to furnish to Guarantor any information or facts relating to the ability of any of Tenneco, Surviving Corporation or the Energy Subsidiaries to pay and perform the applicable Tenneco Liabilities.

(b) Guarantor waives all defenses, counterclaims and offsets of any kind or nature, in connection with the legality, validity and/or enforceability of this Guaranty, including, without limitation, any such defenses, counterclaims or offsets arising directly or indirectly from any agreement, instrument or document executed and delivered, by Tenneco, Surviving Corporation or any of the Energy Subsidiaries, or acquired by Shipbuilding Company from Tenneco, Surviving Corporation or any of the Energy Subsidiaries.

(c) Guarantor waives any and all right to assert against Shipbuilding Company any claim or defense based upon any election of remedies by Shipbuilding Company which in any manner impairs, affects, reduces, releases or extinguishes Guarantor's right to proceed against Tenneco, Surviving Corporation or any of the Energy Subsidiaries for reimbursement, or any other rights of Guarantor against Tenneco, Surviving Corporation or any of the Energy Subsidiaries, or against any other Person.

(d) Guarantor hereby waives notice of the following events or occurrences and agrees that Shipbuilding Company may do any or all of the following in such manner, upon such terms and at such times as Shipbuilding Company in its sole discretion deems advisable without in any way impairing, affecting, reducing or releasing Guarantor from Guarantor's Liabilities: (i) Shipbuilding Company's acceptance of this Guaranty; (ii) Shipbuilding Company's heretofore, now or at any time or times hereafter obtaining, releasing, waiving or modifying of any other Person's guaranty of Tenneco Liabilities given to Shipbuilding Company; (iii) the amendment or modification of any of the Transaction Documents, or the waiver or release of any provisions of the Transaction Documents by Shipbuilding Company; (iv) presentment, demand, notices of default, nonpayment, partial payment and protest, and all other notices or formalities to which Guarantor may be entitled; (v) Shipbuilding Company's heretofore, now or at any time or times hereafter granting to Tenneco, Surviving Corporation or any of the Energy Subsidiaries (or any other Person liable to Shipbuilding Company on account of Tenneco Liabilities) of any indulgences or extensions of time of payment of Tenneco Liabilities; and (vi) Shipbuilding Company's heretofore, now or at any time or times hereafter accepting from Tenneco, Surviving Corporation or any of the Energy Subsidiaries or any other Person any partial payment or payments on account of Tenneco Liabilities or Shipbuilding Company's settling, subordinating, compromising, discharging or releasing the same.

5. REMEDIES.

If Guarantor's Liabilities are not paid or performed forthwith by Guarantor to Shipbuilding Company at Shipbuilding Company's principal place of business, Shipbuilding Company may proceed to suit against Guarantor (at Shipbuilding Company's election, one or more successive or concurrent suits may be brought hereunder by Shipbuilding Company against Guarantor, whether suit has been commenced against Tenneco, Surviving Corporation or any of the Energy Subsidiaries and in any such suit Tenneco, Surviving Corporation or any of the Energy Subsidiaries may be joined (but need not be joined) as a party with Guarantor). In addition, Shipbuilding Company may exercise any other right or remedy provided by law.

6. JURISDICTION.

All questions and/or disputes concerning the legality, construction, validity and interpretation of this Guaranty shall be governed by the internal laws, and not the law of conflicts, of the State of Delaware. Guarantor hereby irrevocably and unconditionally agrees to be subject to, and hereby consents and submits to, the jurisdiction of the courts of the State of Delaware and of the Federal courts sitting in the State of Delaware.

7. MISCELLANEOUS.

If any provision of this Guaranty or the application thereof to any party or circumstance is held invalid or unenforceable, the remainder of this Guaranty and the application of such provision to other Persons or circumstances will not be affected thereby, the provisions of this Guaranty being severable in any such instance.

This Guaranty shall continue in full force and effect until all of the Tenneco Liabilities are fully and indefeasibly paid, performed and discharged. This Guaranty shall continue to be effective or be reinstated, as the case may be, if at any time payment of any of Guarantor's Liabilities is rescinded or must otherwise be returned by Shipbuilding Company upon the insolvency, bankruptcy or reorganization of Guarantor, Tenneco, Surviving Corporation or any of the Energy Subsidiaries or otherwise, all as though such payment had not been made. This Guaranty shall be binding upon Guarantor and its successors and assigns and shall inure to the benefit of Shipbuilding Company, its successors and assigns.

All notices and other communications hereunder shall be in writing and shall be deemed given if delivered personally or mailed by registered or certified mail, return receipt requested, to the parties at the following addresses (until notice of a change thereof is delivered as provided in this paragraph):

Shipbuilding Company: 4101 Washington Avenue
Newport News, VA 23607
Attn: Corporate Secretary

Guarantor: One Paul Kayser Center
100 North Stanton Street
El Paso, TX 79901
Attn: William A. Wise
Chairman and Chief Executive Officer

Shipbuilding Company's failure at any time hereafter to require strict performance by Guarantor of any provision of this Guaranty shall not waive, effect or diminish any right of Shipbuilding Company thereafter to demand strict compliance and performance therewith.

This Guaranty is in addition to, and not limitation of or substitution for, Guarantor's covenants and obligations under the Transaction Documents (including, without limitation, Guarantor's covenants and obligations under Section 6.18 of the Merger Agreement).

IN WITNESS WHEREOF, Guarantor has executed this Guaranty as of the date first above written.

EL PASO NATURAL GAS COMPANY

By: _____
Title:

**EXHIBIT M TO
AGREEMENT AND PLAN OF MERGER
FORM OF AFFILIATE LETTER**

Acquiror

Gentlemen:

I have been advised that as of the date of this letter I may be deemed to be an "affiliate" of Tenneco Inc., a Delaware corporation (the "*Company*"), as the term "affiliate" is defined for purposes of paragraphs (c) and (d) of Rule 145 of the rules and regulations (the "*Rules and Regulations*") of the Securities and Exchange Commission (the "*Commission*") under the Securities Act of 1933, as amended (the "*Act*"). Pursuant to the terms of the Agreement and Plan of Merger dated _____, 1996 (the "*Agreement*"), among Acquiror, a Delaware corporation ("*Acquiror*"), _____, a Delaware corporation (the "*Subsidiary*"), and the Company, Subsidiary will be merged with and into the Company (the "*Merger*").

As a result of the Merger, shares of Tenneco capital stock owned by me will be converted into shares of capital stock of Acquiror ("*Acquiror Stock*").

I represent, warrant and covenant to Acquiror that in the event I receive any Acquiror Stock as a result of the Merger:

A. I shall not make any sale, transfer or other disposition of the Acquiror Stock in violation of the Act or the Rules and Regulations.

B. I have carefully read this letter and the Agreement and discussed the requirements of such documents and other applicable limitations upon my ability to sell, transfer or otherwise dispose of Acquiror Stock to the extent I felt necessary, with my counsel or counsel for the Company.

C. I have been advised that the issuance of Acquiror Stock to me pursuant to the Merger has been or will be registered with the Commission under the Act on a Form S-4 Registration Statement. However, I have also been advised that, because at the time the Merger is submitted for a vote of the stockholders of the Company, (a) I may be deemed to be an affiliate of the Company and (b) the distribution by me of the Acquiror Stock has not been registered under the Act, I may not sell, transfer or otherwise dispose of Acquiror Stock issued to me in the Merger unless (i) such sale, transfer or other disposition is made in conformity with the volume and other limitations of Rule 145 promulgated by the Commission under the Act, (ii) such sale, transfer or other disposition has been registered under the Act or (iii) in the opinion of counsel reasonably acceptable to Acquiror, such sale, transfer or other disposition is otherwise exempt from registration under the Act.

D. I understand that Acquiror is not under an obligation to register the sale, transfer or other disposition of the Acquiror Stock by me or on my behalf under the Act or to take any other action necessary in order to make compliance with an exemption from such registration available solely as a result of the Merger.

E. I also understand that there will be placed on the certificates for the Acquiror Stock issued to me, or any substitutions therefor, a legend stating in substance

"THE SHARES REPRESENTED BY THIS CERTIFICATE WERE ISSUED IN A TRANSACTION TO WHICH RULE 145 PROMULGATED UNDER THE SECURITIES ACT OF 1933 APPLIES. THE SHARES REPRESENTED BY THIS CERTIFICATE MAY ONLY BE TRANSFERRED IN ACCORDANCE WITH THE TERMS OF AN AGREEMENT DATED _____, 1996, BETWEEN THE REGISTERED HOLDER HEREOF AND ACQUIROR, A COPY OF WHICH AGREEMENT IS ON FILE AT THE PRINCIPAL OFFICES OF ACQUIROR."

**EXHIBIT N TO
AGREEMENT AND PLAN OF MERGER**

[Jenner & Block Letterhead]

FORM OF OPINION

, 1996

Tenneco Inc.
1275 King Street
Greenwich, Connecticut 06831
Attn: Robert G. Simpson

Re: Opinion With Respect to the Acquisition of Tenneco Inc. by
El Paso Natural Gas Company

Gentlemen:

We have acted as counsel to Tenneco Inc., a Delaware corporation ("Tenneco"), in connection with the proposed merger of El Paso Merger Company ("Subsidiary"), a newly created, wholly-owned subsidiary of El Paso Natural Gas Company ("Acquiror"), with and into Tenneco (the "Merger"), pursuant to the Agreement and Plan of Merger dated as of , 1996, by and among Acquiror, Subsidiary and Tenneco (the "Merger Agreement"). Subsidiary, Acquiror and Tenneco are sometimes referred to herein collectively as the "Parties." Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Merger Agreement.

You have requested our opinion as to certain of the federal income tax consequences of the Merger.

I. STATEMENT OF FACTS

For purposes of the opinions set forth herein we have relied on the following facts set forth in the Merger Agreement or otherwise represented to us by one or more of the Parties, the truth and accuracy of which have not been independently verified by us:

1. Tenneco is the common parent corporation of an affiliated group of corporations filing a consolidated federal income tax return on a calendar-year basis. Its address is 1275 King Street, Greenwich, Connecticut 06831, and its employer identification number is 76-0233548.

2. As of March 31, 1996, Tenneco had approximately 191,354,932 shares of Common Stock, par value \$5.00 per share, outstanding (the "Tenneco Common Stock"). The shares are listed on the New York, Midwest, Pacific, Toronto, London, Paris, Frankfurt, Dusseldorf, Basel, Geneva, and Zurich stock exchanges. In addition, Tenneco had 391,519 shares of \$7.40 Cumulative Preferred Stock (the "\$7.40 Preferred Stock") and 803,723 shares of \$4.50 Cumulative Preferred Stock (the "\$4.50 Preferred Stock") outstanding. The Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock are sometimes referred to collectively herein as the "Tenneco Stock." As of March 31, 1996, there were Tenneco options outstanding to acquire an aggregate of 5,207,655 shares of Tenneco Common Stock. [Update as of the Closing.]

3. Tenneco is a diversified industrial company conducting all of its operations through its subsidiaries. Tenneco's major business interests are in natural gas transportation and marketing ("Energy Business"); manufacture and sale of automotive exhaust system parts, ride control products and brake products ("Automotive Business"); design, construction and repair of ships and submarines ("Shipbuilding Business"); and manufacture and sale of packaging materials, cartons, containers and speciality packaging products ("Packaging Business").

4. Acquiror is a Delaware corporation and the common parent of an affiliated group of corporations filing a federal consolidated income tax return. As of the date of the Closing, the authorized capital stock of Acquiror consisted of [100,000,000] shares of voting common stock ("Acquiror Common Stock") and [] shares of par value Adjustable Rate Cumulative Preferred Stock ("Acquiror Preferred Stock"). [Update as of Closing.] The adjustable Rate Cumulative Preferred Stock is a series of voting preferred stock of the Acquiror with the terms set forth in Exhibit B to the Merger Agreement. Acquiror Common Stock and Acquiror Preferred Stock are sometimes collectively referred to herein as "Acquiror Stock."

5. Subsidiary, a corporation, was formed on , 1996, solely as an acquisition vehicle for purposes of accomplishing the Merger. Subsidiary is a newly created, wholly-owned first tier subsidiary of Acquiror and it has not material assets or liabilities.

6. The Parties have entered into the Merger Agreement, which provides for the merger of Subsidiary with and into Tenneco, with Tenneco surviving as a subsidiary of Acquiror. The Merger is related to other transactions preceding the Merger that will be carried out according to the Distribution Agreement dated as of 1996 ("Distribution Agreement") among Tenneco, [Newco], a Delaware corporation ("Newco"), and Tenneco InterAmerica Inc., a Delaware corporation ("TIA"). The Distribution Agreement and the transactions contemplated therein are integral parts of a plan for reorganizing Tenneco and its subsidiaries.

7. Pursuant to the Distribution Agreement, Tenneco and its subsidiaries will, through various intercompany transfers and distributions, divide and separate their existing businesses such that Newco will own, directly or indirectly, all of the assets, liabilities and operations of the Automotive and Packaging Businesses of Tenneco, and TIA will own, directly or indirectly, all of the assets, liabilities and operations of the Shipbuilding Business of Tenneco (the "Restructuring"). Thereafter, Tenneco will distribute all of the capital stock of Newco and TIA on a pro rata basis as a dividend to the holders of Tenneco Common Stock (the "Spin-offs"). The Parties intend (i) for the Spin-offs to qualify for tax-free treatment pursuant to Section 355 of the Internal Revenue Code of 1986, as amended (the "Code"), and (ii) for the Merger to qualify as a tax-free reorganization pursuant to Code Section 368(a)(1)(B). The Restructuring and the Spin-offs collectively are described in greater detail in section C of the ruling request filed by Tenneco, dated as of , 1996 (the "Ruling Request"), and the foregoing summary is qualified in its entirety by the description contained in the Ruling Request, as amended prior to the date hereof, and the terms of the Distribution Agreement.

8. Following the Spin-offs, but prior to the Merger, Tenneco shall either issue shares of \$ Cumulative Preferred Stock of Tenneco ("New Preferred Stock") in a public or private offering for cash proceeds or distribute the New Preferred Stock on a pro rata basis to holders of Tenneco Common Stock. The New Preferred Stock will have an aggregate value approximately equal to 25% of the Aggregate value of all of the classes of capital stock of Tenneco immediately following the Merger. The holders of the New Preferred Stock will have the right to vote as a separate class to elect a number of directors of the Board of Directors of Tenneco, rounded up to the nearest whole number, representing one-sixth of the members of the Board of Directors of Tenneco. The directors elected by the holders of the New Preferred Stock will have the same rights to vote on matters as all other directors of Tenneco. The terms of the New Preferred Stock are set forth in Exhibit D to the Merger Agreement.

9. As promptly as practicable after the Spin-offs and the satisfaction of the conditions contained in the Merger Agreement, the Parties shall consummate the Merger. Pursuant to the Merger Agreement, each share of Tenneco Common Stock owned, directly or indirectly, by Tenneco shall be canceled and retired. In addition, each share of Tenneco Common Stock issued and outstanding shall be converted into the right to receive shares of Acquiror Common Stock (or, in the event a shareholder vote is required for the issuance of such Acquiror Common Stock, and a majority of the Acquiror Common Stock does not approve the issuance of such Acquiror Common Stock (a "No Vote"), a number of shares of Acquiror Preferred Stock or Acquiror Common Stock as determined pursuant to Section 2.5 of the Merger Agreement). Each share of \$7.40 Preferred Stock issued and outstanding shall be converted into the right to receive shares of Acquiror Common Stock in accordance with the terms of the Merger Agreement (or, in the event of a No Vote, a number of shares of

Acquiror Preferred Stock or Acquiror Common Stock as determined pursuant to Section 2.5 of the Merger Agreement), and each share of \$4.50 Preferred Stock issued and outstanding shall be converted into the right to receive shares of Acquiror Common Stock in accordance with the terms of the Merger Agreement (or, in the event of a No Vote, number of shares of Acquiror Preferred Stock or Acquiror Common Stock as determined pursuant to Section 2.5 of the Merger Agreement). Each share of Subsidiary stock owned and outstanding shall be converted into and become one fully paid and nonassessable share of Tenneco Common Stock. As a result of these exchanges, Acquiror will acquire all of Tenneco's issued and outstanding stock, except for the New Preferred Stock which will not be affected by the Merger and shall remain outstanding immediately after the Merger.

10. Section 1.6(c) of the Merger Agreement provides that, notwithstanding anything to the contrary in paragraph 1.9 above, no scrip or fractional shares of Acquiror Stock shall be issued in the Merger. Instead, the Exchange Agent shall sell on the NYSE, for the account of the persons otherwise entitled to such fractional share interests, shares of Acquiror Common Stock, as the case may be, equivalent to the aggregate of such fractional share interests. The Exchange Agent will pay the net proceeds of such sale, without interest, to the persons otherwise entitled to fractional share interests who surrender their shares of Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock.

11. Section 2.6(h) of the Merger Agreement provides that, notwithstanding anything to the contrary in paragraph 1.0 above, holders of Tenneco's \$4.50 Preferred Stock who have properly demanded appraisal of such shares (the "Dissenters") in accordance with Section 262 of the Delaware General Corporation Law ("DGCL") shall not receive shares of Acquiror Preferred Stock in exchange for such stock. Instead, the Dissenters will receive such consideration as may be determined to be due the Dissenters pursuant to Section 262 of the DGCL. All such consideration paid to the Dissenters shall be paid by Tenneco from the \$25,000,000 of cash required to be on hand prior to the Effective Time pursuant to the Allocation Agreement, which cash shall have been deposited by Tenneco into a separate escrow account. Acquiror shall not have directly contributed any cash to such escrow account nor shall Acquiror have guaranteed or otherwise supported any new borrowing the proceeds of which are contributed to such escrow account.

12. Under the Merger Agreement, Tenneco will use its commercially reasonable efforts to have in place a credit facility for itself to fund such tenders, redemptions, prepayments, deficiencies and maturities as will be effected pursuant to the Debt Realignment, as described in Exhibit C to the Merger Agreement. Acquiror is required to cooperate with Tenneco in arranging such credit facility and is required to provide such credit support and undertakings as shall be reasonably requested of it by the providers of the credit facility. As a result, the Acquiror may acquire directly, or become indirectly liable for the payment of, debts of Tenneco and its consolidated Energy Subsidiaries ("Consolidated Debt") other than any new debt incurred to fund payments into the escrow account to pay Dissenters as described in 1.11 above. A substantial portion of the Consolidated Debt is held by persons other than Tenneco's shareholders.

13. Section 10.1 of the Merger Agreement provides that subsequent to the Merger, Acquiror will cause the Surviving Corporation promptly to pay any and all legal and other costs and expenses, including, without limitation, the fees and expenses of the Exchange Agent and Tenneco's financial advisors, and all legal, accounting and actuarial fees and expenses that are incurred by Tenneco in connection with the Merger Agreement and the transactions contemplated by the Merger Agreement; provided such expenses are incurred prior to the Effective Time, and have not been paid as of such time. In addition, Section 10.1(c) of the Merger Agreement provides that Tenneco will establish a separate escrow account, consisting of an adequate amount of cash from the \$25,000,000 of cash required to be on hand pursuant to the Allocation Agreement, to fund any New York State Tax on Gains Derived from Certain Real Property Transfers, the New York State Real Estate Transfer Tax and New York City Real Property Transfer Tax (these taxes are referred to herein collectively as the "Transfer Taxes") and any similar taxes in any other jurisdiction that become payable in connection with the Merger.

14. Tenneco and Acquiror believe that the Merger will enhance prospects for the future growth of the Energy Business due to the affiliation with another corporation possessing similar and complementary lines of business.

II. ADDITIONAL ASSUMPTIONS AND REPRESENTATIONS

The following representations have been made by each of the Parties (to the extent such representation relates to such Party) in connection with the Merger, and have been relied on by us in rendering the opinions set forth herein:

1. Except as otherwise provided in the Merger Agreement, Tenneco, Acquiror, Subsidiary and the Tenneco stockholders will each pay their own expenses, if any, in connection with the Merger.

2. To the best of the knowledge of the management of Tenneco, there is no plan or intention on the part of the Tenneco stockholders to sell, exchange, or otherwise dispose of a number of shares of Acquiror Stock received in the Merger that would reduce the Tenneco stockholders' ownership of Acquiror Stock to a number of shares having a value, as of the Closing Date, of less than 50% of the value of all of the formerly outstanding Tenneco Stock as of the Closing Date. For purposes of this representation, shares of Tenneco Stock surrendered by Dissenters or exchanged for cash in lieu of fractional shares of Acquiror Stock will be treated as outstanding Tenneco Stock on the Closing Date. Moreover, shares of Tenneco Stock and shares of Acquiror Stock held by Tenneco stockholders and otherwise sold, redeemed or disposed of prior or subsequent to the Closing Date will be considered in making this representation. There are no Tenneco stockholders who own beneficially five percent or more of the Tenneco Stock.

3. The fair market value of the Acquiror Stock received by each of the Tenneco stockholders will be approximately equal to the fair market value of the Tenneco Stock surrendered in the Merger.

4. Immediately after the Merger, the outstanding capital stock of Tenneco shall consist solely of the Tenneco Common Stock and the New Preferred Stock, and Acquiror shall own 100% of the Tenneco Common Stock. Acquiror has no plan or intention to cause Tenneco to issue additional shares that would result in Acquiror losing control of Tenneco within the meaning of Section 368(c)(1) of the Code.

5. On the Closing Date, Tenneco will not have outstanding any warrants, options, convertible securities, or any other type of right pursuant to which any Person could acquire stock in Tenneco that, if exercised or converted, would affect Acquiror's acquisition or retention of control of Tenneco, as defined in Section 368(c)(1) of the Code.

6. None of the Parties is an investment company as defined in Section 368(a)(2)(F)(iii) and (iv) of the Code.

7. On the Closing Date, the fair market value of the assets of Tenneco will exceed the sum of its liabilities plus the liabilities, if any, to which Tenneco's assets are subject.

8. A substantial portion of the Consolidated Debt is owned by persons who are not owners of Tenneco stock.

9. The payment of cash in lieu of fractional shares of Acquiror Stock is solely for the purpose of avoiding the expense and inconvenience to Acquiror of issuing fractional shares and does not represent separately bargained-for consideration. The total cash consideration that will be paid in the transaction to the Tenneco stockholders instead of issuing fractional shares of Acquiror Stock will not exceed one percent of the total consideration that will be issued in the transaction to the Tenneco stockholders in exchange for their shares of Tenneco Stock. The fractional share interests of each stockholder with respect to each class of Acquiror Stock will be aggregated, and no stockholder will receive cash in an amount greater to or greater than the value of one full share of Acquiror Stock of any such class.

10. Acquiror has no present plan or intention to liquidate Tenneco, to merge Tenneco into another corporation, to cause Tenneco to sell or otherwise dispose of its assets (other than the sale of certain assets unrelated (or immaterial in relation) to Tenneco's interstate pipeline or natural gas marketing businesses), or to sell or otherwise dispose of any Tenneco Stock acquired in the Merger, except for transfers described in Section 368(a)(2)(C) of the Code.

11. Acquiror has no plan or intention to reacquire any Acquiror Stock issued to Tenneco stockholders in the Merger.

12. Acquiror will acquire the Tenneco Stock in exchange for Acquiror Stock as provided in Section 2.5 of the Merger Agreement. For purposes of this representation, Tenneco Stock redeemed for cash or other property furnished by Acquiror will be considered as acquired by Acquiror. Further, no liabilities of Tenneco or the Tenneco shareholders will be assumed by Acquiror, nor will any of the Tenneco Stock be subject to any liabilities.

13. Acquiror does not presently own, directly or indirectly, nor has it owned during the past five years, directly or indirectly, any capital stock of Tenneco.

14. Immediately following the Merger, Acquiror will continue the Energy Business or use a significant portion of the assets of the Energy Business in a business.

In addition to the facts, assumptions and representations set forth above, we have examined and relied on such statutes, regulations, records, certificates and other documents as we have considered necessary or appropriate as a basis for the opinions rendered below, including, but not limited to, the following:

- (a) The Merger Agreement and its exhibits;
- (b) The Distribution Agreement and its exhibits;
- (c) The Tax Sharing Agreement dated as of _____, 1996, by and between Tenneco, Newco and TIA;
- (d) The representation letter of Tenneco dated _____, 1996, delivered to us pursuant to section 6.6 of the Merger Agreement and in the form set forth in Exhibit I to the Merger Agreement;
- (e) The representation letter of Acquiror and Subsidiary dated _____, 1996, delivered to us pursuant to section 6.6 of the Merger Agreement and in the form set forth in Exhibit I to the Merger Agreement; and
- (f) [list of other appropriate documents including:
 - a. Any registration statement on form S-1, including the S-1's for Newco, TIA and the New Preferred;
 - b. Any underwriting agreement, including the underwriting agreement for Newco, TIA and the New Preferred; and
 - c. Any appropriate debt or loan documents.]

The documents referred to in items (a) through (f) above are referred to herein as the "Transaction Documents."

In our examination of the Transaction Documents, we have assumed, without independent investigation, that each of the Transaction Documents has been duly executed and delivered by the respective parties thereto in the form reviewed by us and are enforceable against such parties in accordance with their terms and that all obligations imposed by any such documents on the parties thereto have been or will be performed or satisfied in accordance with the terms of such documents. We have further assumed that the Merger of Tenneco and Subsidiary and related transactions will be carried out strictly in accordance with the terms of the Merger Agreement and the other Transaction Documents.

In rendering the opinions set forth herein, we have also assumed (i) the genuineness of all signatures on documents we have examined, (ii) the authenticity of all documents submitted to us as originals, (iii) the conformity to the original documents of all documents submitted to us as copies, (iv) the authority and capacity of the individual or individuals who executed any such document on behalf of any person, (v) the accuracy and completeness of all records made available to us, and (vi) the factual accuracy of all representations, warranties and other statements made by all parties.

We have further assumed, without investigation, that all documents, representations, warranties and covenants on which we have relied as set forth herein in rendering the opinions set forth below and that were given or dated earlier than the date of this letter continue to remain accurate, in so far as relevant to the opinions set forth below, from such earlier date through and including the date of this letter.

III. OPINIONS

Based on our review of relevant provisions and limitations of the Code, Treasury Regulations promulgated thereunder (including Proposed, Temporary and Final Regulations), legislative history of the Code, as of the date hereof, and interpretations of the code by the Service and the courts having jurisdiction over such matters, we are of the following opinion:

1. The Merger will qualify as a tax-free reorganization within the meaning of Section 368(a)(1)(B) of the Code. The Parties will each be a "party to a reorganization" within the meaning of Code Section 368(b).
2. Acquiror will not recognize any gain or loss upon the receipt of Tenneco Stock, solely in exchange for Acquiror Stock, as set forth in the Merger Agreement.
3. Acquiror's basis in Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock will, in each case, be equal to the basis of such stock in the hands of the Tenneco shareholders immediately prior to the Merger.
4. Acquiror's holding period for Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock will, in each case, include the period during which such stock was held by the shareholders of Tenneco.
5. The holders of Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock will not recognize any gain or loss upon the exchange of such stock for Acquiror Stock.
6. The basis of the Acquiror Stock to be received by the holders of Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock will be the same as the basis of the Tenneco Stock surrendered in exchange therefor.
7. The holding period for the Acquiror Stock to be received by the holders of Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock will include the holding period for the Tenneco Stock surrendered in exchange therefor, provided that the Tenneco Stock surrendered is held as a capital asset on the Closing Date.
8. The payment of cash to holders of Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock in lieu of the issuance of fractional shares by Acquiror will be treated for federal income tax purposes as if the fractional shares were issued in the transaction and then redeemed by Acquiror. These cash payments will be treated as having been received as distributions in full payment in exchange for the stock redeemed as provided in Section 302(a) of the Code. A holder of Tenneco Common Stock, \$7.40 Preferred Stock and \$4.50 Preferred Stock receiving cash for fractional shares will recognize capital gain or loss thereon, provided the shares of Tenneco Stock surrendered for such fractional interests are held as capital assets by the Tenneco stockholders on the Closing Date, in an amount equal to the difference between the amount of cash received and the portion of such shareholder's basis in the shares of Tenneco Stock allocable to such fractional share interests. Such capital gain or loss will be long term capital gain or loss if the holding period for such shares is more than one year.
9. Holders of Tenneco's \$4.50 Preferred Stock who properly demand appraisal of such shares in accordance with Section 262 of the DGCL, and as a result receive only cash in the merger, will be treated as having received that cash as a distribution in redemption of such stock subject to the provisions and limitations of Section 302 of the Code. These Dissenters who hold no Acquiror Stock, directly or through the application of Code Section

318, shall be treated as having a complete termination of interest within the meaning of Code Section 302(b)(3), and the cash received will be treated as a distribution in full payment in exchange for such Tenneco \$4.50 Preferred Stock as provided in Code Section 302(a). Holders of such \$4.50 Preferred Stock receiving solely cash will recognize capital gain or loss thereon, provided such shares are held as capital assets on the Closing Date, in an amount equal to the difference between the amount of cash received and the shareholder's basis in the shares surrendered. Such capital gain or loss will be long term capital gain or loss if the holding period for such shares is more than one year.

As noted above, our opinions set forth above are based on relevant provisions and limitations of the Code, Treasury Regulations promulgated thereunder (including Proposed, Temporary and Final Regulations), legislative history of the Code, as of the date hereof, and interpretations of the Code by the Service and the courts having jurisdiction over such matters. These provisions and interpretations are subject to change, either prospectively or retroactively, which might result in modification of our opinion. Also, any variation or difference in the facts from those set forth above or otherwise provided to us may affect the conclusions stated herein.

No opinion is expressed regarding the tax treatment of the Merger under any other provision of the Code, the Treasury Regulations, or under any state, local or foreign tax laws. In addition, no opinion is expressed regarding the tax treatment of any conditions existing at the time of, or effects resulting from, the Merger that are not specifically covered by the above opinions.

This opinion is based on the facts, circumstances and law in existence as of the date of this letter, and we disclaim any responsibility to advise the Parties of any matters arising after the date hereof that may affect the conclusions set forth herein.

Our opinion is provided as a legal opinion only, and while it represents our best legal judgment, it does not constitute, and shall not be deemed to constitute a guaranty, warranty, or surety of the matters discussed herein. Accordingly, we can provide no assurances that the Service (and other applicable state, local and foreign tax authorities) may not take positions which conflict with the opinions expressed herein, which positions might ultimately be sustained by the courts. Our opinions have no binding, legal effect on the Service, the courts or any other applicable state, local or foreign tax authority.

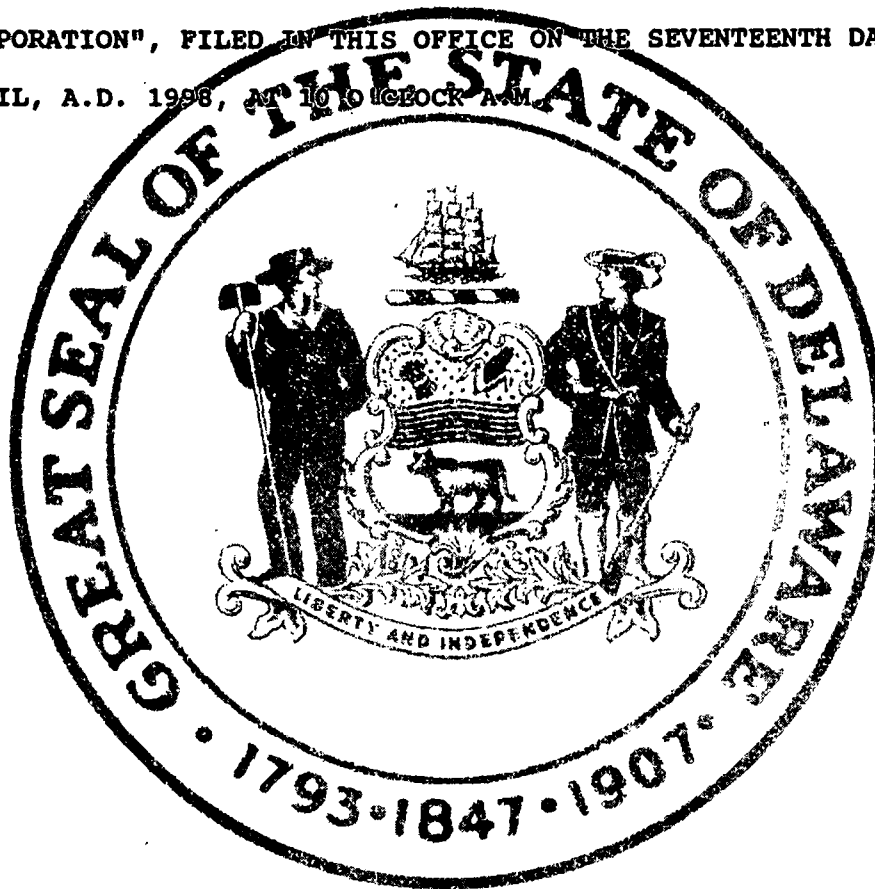
The opinions set forth above are solely for the benefit of Tenneco Inc. and the shareholders of Tenneco, and it may not be relied upon or used by any other person or for any other purpose without our express written consent.

JENNER & BLOCK

By: _____
a partner

State of Delaware
Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF
DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT
COPY OF THE CERTIFICATE OF INCORPORATION OF "EL PASO ENERGY
CORPORATION", FILED IN THIS OFFICE ON THE SEVENTEENTH DAY OF
APRIL, A.D. 1998, AT 10 10 CLOCK A.M.



A handwritten signature in cursive script, reading "Edward J. Freel".

Edward J. Freel, Secretary of State

2884676 8100

981146887

AUTHENTICATION:

9032298

DATE:

04-17-98

CERTIFICATE OF INCORPORATION

OF

EL PASO ENERGY CORPORATION

FIRST: The name of the corporation is:

EL PASO ENERGY CORPORATION

SECOND: The address of the Corporation's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, City of Wilmington, New Castle County, Delaware 19801, and the name of its registered agent at the above address is The Corporation Trust Company.

THIRD: The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH: The total number of shares of stock the corporation shall have authority to issue is one thousand (1,000) shares of common stock with a par value of one dollar (\$1.00) per share.

Shares of stock of this corporation whether with or without par value, of any class or classes hereby or hereafter authorized, may be issued by this corporation from time to time for such consideration permitted by law as may be fixed from time to time by the Board of Directors.

FIFTH: Unless required by the By-laws, the election of the Board of Directors need not be by written ballot.

Upon the filing of the Certificate of Incorporation, the powers of the incorporator shall terminate and the following named individuals, whose mailing addresses are set out beside their respective names, shall serve as directors until the first meeting of the stockholders or until successors are elected and qualified:

H. Brent Austin

1001 Louisiana
Houston, Texas 77002

William A. Wise

1001 Louisiana
Houston, Texas 77002

SIXTH: The Board of Directors of this corporation is expressly authorized to make, alter, or repeal by-laws of the corporation, but the stockholders may make additional by-laws and may alter or repeal any by-law whether or not adopted by them.

SEVENTH: The corporation shall indemnify its officers and directors to the full extent permitted by the General Corporation Law of the State of Delaware, as amended from time to time.

EIGHTH: No director of the Corporation shall be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, for any act or omission, except that a director may be liable (i) for breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the General Corporation Law of the State of Delaware, or (iv) for any transaction from which the director derived an improper personal benefit. If the General Corporation Law of the State of Delaware is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of the directors shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware, as so amended. The elimination and limitation of liability provided herein shall continue after a director has ceased to occupy such position as to acts or omissions occurring during such director's term or terms of office. Any amendment, repeal or modification of this Article Eighth shall not adversely affect any right of protection of a director of the Corporation existing at the time of such repeal or modification.

NINTH: Kelly J. Jameson is the sole incorporator and his mailing address is 1001 Louisiana Street, Houston, TX 77002.

IN WITNESS WHEREOF, I have signed this Certificate of Incorporation this 15th day of April 1998.

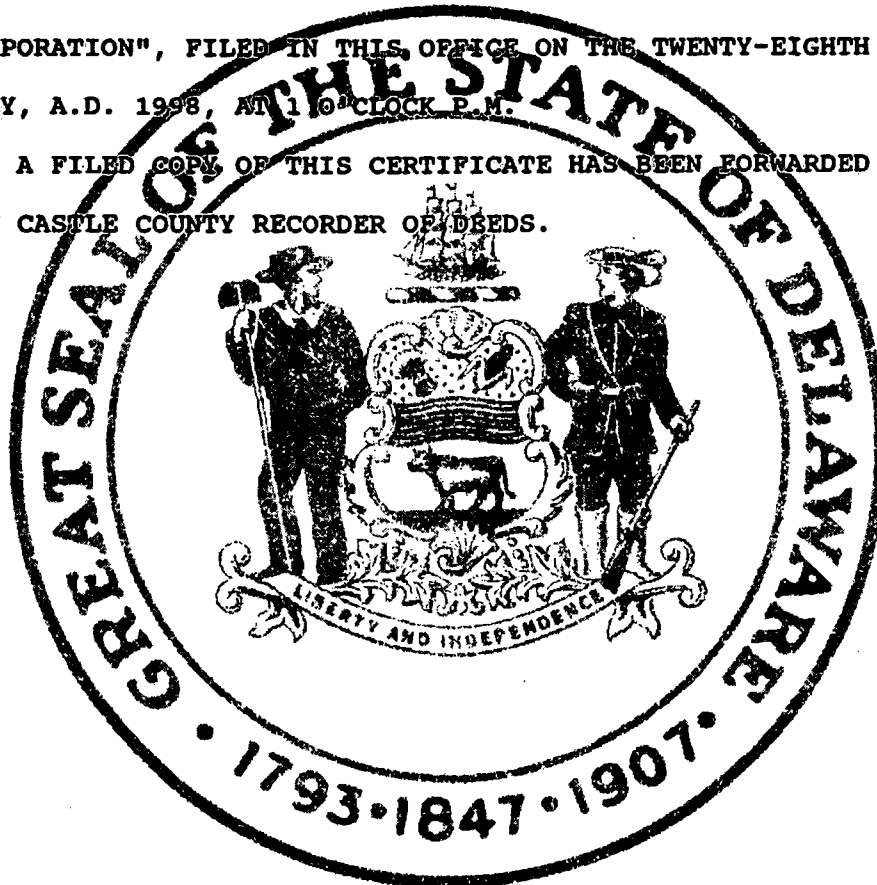
Kelly J. Jameson

Kelly J. Jameson, Incorporator

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "EL PASO ENERGY CORPORATION", FILED IN THIS OFFICE ON THE TWENTY-EIGHTH DAY OF JULY, A.D. 1998, AT 1 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Edward J. Freel

Edward J. Freel, Secretary of State

AUTHENTICATION:

9221534

DATE:

07-29-98

2884676 8100

981292938

RESTATED
CERTIFICATE OF INCORPORATION
OF
EL PASO ENERGY CORPORATION

El Paso Energy Corporation, a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

1. The original Certificate of Incorporation was filed with the Secretary of State on April 17, 1998. The name under which it was originally incorporated is El Paso Energy Corporation.

2. The following Restated Certificate of Incorporation was duly proposed by the corporation's Board of Directors pursuant to the applicable provisions of Section 242 and Section 245 of the General Corporation Law of the State of Delaware. In lieu of a meeting of the stockholders, unanimous written consent of the sole stockholder of El Paso Energy Corporation has been given for the adoption of said Restated Certificate of Incorporation and the amendments to be made thereby pursuant to the applicable provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware.

ARTICLE 1. NAME

The name of this corporation is EL PASO ENERGY CORPORATION.

ARTICLE 2. REGISTERED OFFICE AND AGENT

The address of the registered office of this corporation is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, State of Delaware 19801, and the name of its registered agent at such address is The Corporation Trust Company.

ARTICLE 3. PURPOSES

The purpose of this corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE 4. SHARES

The total number of authorized shares of all classes of stock of this corporation consist of 275,000,000 shares of common stock having a par value of \$3.00 per share and 25,000,000 shares of preferred stock having a par value of \$0.01 per share. Authority is hereby expressly granted to the Board of Directors to fix by resolution or resolutions any of the designations and the powers, preferences and rights, and the qualifications, limitations or restrictions which are permitted by the General Corporation Law of the State of Delaware in respect of any class or classes of stock or any series of any class of stock of the corporation.

ARTICLE 5. BY-LAWS

The Board of Directors shall have the power to adopt, amend or repeal the By-laws of this corporation, subject to the power of the stockholders to amend or repeal such By-laws. The stockholders having voting power shall also have the power to adopt, amend or repeal the By-laws of this corporation.

ARTICLE 6. ELECTION OF DIRECTORS

Except as may be otherwise required by the By-laws, written ballots are not required in the election of Directors.

ARTICLE 7. PREEMPTIVE RIGHTS

Preemptive rights shall not exist with respect to shares of stock or securities convertible into shares of stock of this corporation.

ARTICLE 8. CUMULATIVE VOTING

The right to cumulate votes in the election of Directors shall not exist with respect to shares of stock of this corporation.

ARTICLE 9. AMENDMENTS TO RESTATED CERTIFICATE OF INCORPORATION

This corporation reserves the right to amend or repeal any of the provisions contained in this Restated Certificate of Incorporation in any manner now or hereafter permitted by law, and the rights of the stockholders of this corporation are granted subject to this reservation.

ARTICLE 10. LIMITATION OF DIRECTOR LIABILITY

To the full extent that the General Corporation Law of the State of Delaware, as it exists on the date hereof or may hereafter be amended, permits the limitation or elimination of the liability of Directors, a Director of this corporation shall not be liable to this corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director. Any amendment to or repeal of this Article 10 shall not adversely affect any right or protection of a Director of this corporation for or with respect to any acts or omissions of such Director occurring prior to such amendment or repeal.

ARTICLE 11. ACTION BY STOCKHOLDERS WITHOUT A MEETING

Any action by the stockholders of this corporation shall be taken at a meeting of stockholders and no action may be taken by written consent of stockholders entitled to vote on such action.

ARTICLE 12. SPECIAL VOTING REQUIREMENTS

In addition to any affirmative vote required by law, by this Restated Certificate of Incorporation, by any agreement with any national securities exchange, or as may be otherwise required, any "Business Combination" (as hereinafter defined) involving this corporation shall be subject to approval in the manner set forth in this Article 12.

12.1 Definitions.

For the purposes of this Article 12:

(a) "Affiliate" and "beneficial owner" are used herein as defined in Rule 12b-2 and Rule 13d-3, respectively, under the Securities Exchange Act of 1934 as in effect on January 1, 1992 (the "1934 Act"). The term "Affiliate" as used herein shall exclude this corporation, but shall include the definition of "Associate" as contained in said Rule 12b-2.

(b) An "Interested Stockholder" is a person other than (i) the corporation or (ii) Burlington Resources Inc., a Delaware corporation ("BRI"), as long as BRI continues to own at least a majority of the stock of this corporation entitled to vote for the election of Directors ("Voting Stock") and there has been no Change in Control of BRI since January 1, 1992, who is (A) the beneficial owner of ten percent or more of the Voting Stock or (B) an Affiliate of this corporation which (1) at any time within a two-year period prior to the record date for the vote on a Business Combination was the beneficial owner of ten percent or more of the Voting Stock, or (2) at the completion of

the Business Combination will be the beneficial owner of ten percent or more of the Voting Stock.

(c) A "Person" is a natural person or a legal entity of any kind, together with any Affiliate of such person or entity, or any person or entity with whom such person, entity or any Affiliate has any agreement or understanding relating to acquiring, voting or holding Voting Stock.

(d) A "Disinterested Director" is a member of the Board of Directors of this corporation (other than the Interested Stockholder) who was a Director prior to the time the Interested Stockholder became an Interested Stockholder, or any Director who was recommended for election by the Disinterested Directors. Any action to be taken by the Disinterested Directors shall require the affirmative vote of at least two-thirds of the Disinterested Directors.

(e) A "Business Combination" is (i) a merger or consolidation of this corporation or any of its subsidiaries with an Interested Stockholder; (ii) the sale, lease, exchange, pledge, transfer or other disposition (A) by this corporation or any of its subsidiaries of all or a Substantial Part of the corporation's Assets to an Interested Stockholder, or (B) by an Interested Stockholder of any of its assets, except in the ordinary course of business, to this corporation or any of its subsidiaries; (iii) the issuance of stock or other securities of this corporation or any of its subsidiaries to an Interested Stockholder, other than on a pro rata basis to all holders of Voting Stock of the same class held by the Interested Stockholder pursuant to a stock split, stock dividend or distribution of warrants or rights; (iv) the adoption of any plan or proposal for the liquidation or dissolution of this corporation proposed by or on behalf of an Interested Stockholder; (v) any reclassification of securities, recapitalization, merger or consolidation or other transaction which has the effect, directly or indirectly, of increasing the proportionate share of any Voting Stock beneficially owned by an Interested Stockholder; or (vi) any agreement, contract or other arrangement providing for any of the foregoing transactions.

(f) A "Substantial Part of the corporation's Assets" shall mean assets of this corporation or any of its subsidiaries in an amount equal to twenty percent or more of the fair market value, as determined by the Disinterested Directors, of the total consolidated assets of this corporation and its subsidiaries taken as a whole as of the end of its most recent fiscal year ended prior to the time the determination is made.

(g) A "Change in Control" shall be deemed to occur (i) if any Person is or becomes the "beneficial owner" (as defined in Rule 13d-3 of the 1934 Act), directly or indirectly, of securities of BRI representing twenty percent or more of the stock of BRI entitled to vote for Directors of BRI, (ii) upon the first purchase of BRI's common stock pursuant to a tender or exchange offer (other than a tender or exchange offer made by BRI), (iii) upon the approval by BRI's stockholders of a merger or consolidation, a sale or disposition of all or substantially all of BRI's assets or a plan of liquidation or

dissolution of BRI, or (iv) if, during any period of two consecutive years, individuals who at the beginning of such period constitute the BRI Board of Directors cease for any reason to constitute at least a majority thereof, unless the election or nomination of the election by BRI's stockholders of each new Director was approved by a vote of at least two-thirds of the Directors then still in office who were Directors at the beginning of the period.

12.2 Vote Required for Business Combinations.

The affirmative vote of not less than fifty-one percent of the Voting Stock, excluding the Voting Stock of an Interested Stockholder who is a party to the Business Combination, shall be required for the adoption or authorization of a Business Combination, unless the Disinterested Directors determine that:

(a) The Interested Stockholder is the beneficial owner of not less than eighty percent of the Voting Stock and has declared its intention to vote in favor of or to approve such Business Combination; or

(b) (i) The fair market value of the consideration per share to be received or retained by the holders of each class or series of stock of this corporation in a Business Combination is equal to or greater than the consideration per share (including brokerage commissions and soliciting dealer's fees) paid by such Interested Stockholder in acquiring the largest number of shares of such class of stock previously acquired in any one transaction or series of related transactions, whether before or after the Interested Stockholder became an Interested Stockholder and (ii) the Interested Stockholder shall not have received the benefit, directly or indirectly (except proportionately as a stockholder), of any loans, advances, guarantees, pledges or other financial assistance provided by this corporation, whether in anticipation of or in connection with such Business Combination or otherwise.

12.3 Information Requirements.

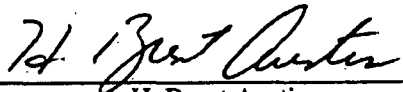
In the event any vote of holders of Voting Stock is required for the adoption or approval of any Business Combination, a proxy or information statement describing the Business Combination and complying with the requirements of the 1934 Act shall be mailed at a date determined by the Disinterested Directors to all stockholders of this corporation whether or not such statement is required under the 1934 Act. The statement shall contain any recommendations as to the advisability of the Business Combination which the Disinterested Directors, or any of them, may choose to state and, if deemed advisable by the Disinterested Directors, an opinion of an investment banking firm as to the fairness of the terms of such Business Combination. Such firm shall be selected by the Disinterested Directors and be paid a fee for its services by this corporation as approved by the Disinterested Directors.

12.4 Amendment.

No amendment to this Restated Certificate of Incorporation shall amend, alter, change or repeal any of the provisions of Article 11 or of this Article 12 unless such amendment shall receive the affirmative vote of not less than fifty-one percent of the Voting Stock, excluding the Voting Stock of any Interested Stockholder as defined in Section 12.1 of this Article 12.

IN WITNESS WHEREOF, the undersigned has executed this document and affirms, under penalties of perjury, that the statements herein are true and that this instrument is the act and deed of El Paso Energy Corporation as of this 16th day of July 1998:

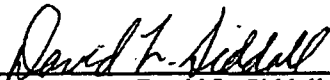
EL PASO ENERGY CORPORATION



H. Brent Austin

Executive Vice President and
Chief Financial Officer

Attest:



David L. Siddall
Corporate Secretary

State of Delaware
Office of the Secretary of State

PAGE 1

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP, WHICH MERGES:

"EL PASO CORPORATION", A DELAWARE CORPORATION,
WITH AND INTO "EL PASO ENERGY CORPORATION" UNDER THE NAME OF
"EL PASO CORPORATION", A CORPORATION ORGANIZED AND EXISTING
UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED
IN THIS OFFICE THE FIFTH DAY OF FEBRUARY, A.D. 2001, AT 4
O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF
THE AFORESAID CERTIFICATE OF OWNERSHIP IS THE SEVENTH DAY OF
FEBRUARY, A.D. 2001, AT 12:01 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE
NEW CASTLE COUNTY RECORDER OF DEEDS.



2884676 8100M

010058609

Harriet Smith Windsor
Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 0956623

DATE: 02-05-01

CERTIFICATE OF OWNERSHIP AND MERGER

merging

EL PASO CORPORATION

with and into

EL PASO ENERGY CORPORATION

Pursuant to Section 253 of the General Corporation Law of the State of Delaware.

El Paso Energy Corporation, a Delaware corporation (the "Company"), for the purpose of merging El Paso Corporation, a Delaware corporation (the "Subsidiary") with and into the Company, does hereby certify as follows:

FIRST: That the name and state of incorporation of each constituent corporation of the merger is as follows:

<u>Name</u>	<u>State of Incorporation</u>
El Paso Corporation	Delaware
El Paso Energy Corporation	Delaware

SECOND: That the Company owns all of the outstanding shares of each class of the capital stock of the Subsidiary.

THIRD: That the Company, by the resolutions adopted by the Company's Board of Directors on the 24th day of January 2001 and attached hereto as Exhibit A, determined to merge into itself the Subsidiary on the conditions set forth in such resolutions.

FOURTH: That this Certificate of Ownership and Merger and the merger contemplated hereby shall be effective at 12:01 a.m., on February 7, 2001 (the "Effective Time").

FIFTH: That at the Effective Time in accordance with Section 253(b) of the General Corporation Law of the State of Delaware, Article 1. of the Certificate of Incorporation of the Company shall be amended to read in its entirety as follows:

"ARTICLE 1. NAME

The name of this corporation is **EL PASO CORPORATION.**"

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 04:00 PM 02/05/2001
010058609 - 2884676

02/05/01 13:32 FAX 713 420 4089

CORP. LAW DEPT.

004/008

IN WITNESS WHEREOF, said El Paso Energy Corporation, has caused this certificate to be signed by the duly authorized undersigned officer this 5th day of February 2001.

EL PASO ENERGY CORPORATION

By: David L. Siddall
David L. Siddall
Vice President

KMI0000574

EXHIBIT A

WHEREAS, this Company is the owner of all of the issued and outstanding shares of common stock of El Paso Corporation, a Delaware corporation (the "Subsidiary"); and

WHEREAS, this Company desires to merge the Subsidiary with and into itself and to possess all of the estate, property, rights, privileges and franchises of the Subsidiary; and

WHEREAS, the Board of Directors of this Company believes it is in the best interest of this Company and its stockholders to merge the Subsidiary with and into itself.

NOW, THEREFORE, BE IT RESOLVED that this Company merge the Subsidiary with and into itself, that the separate existence of the Subsidiary cease at the Effective Time (hereafter defined), and that this Company, as the surviving Company of the merger pursuant to Section 253 of the General Corporation Law of the State of Delaware (the "DGCL"), continue to exist by virtue of, and be governed by, the laws of the State of Delaware (such actions, collectively, being called the "Merger") and that the Merger be, and hereby is, approved.

RESOLVED that the Merger shall be effective at 12:01 a.m., on February 7, 2001, (such date and time being referred to herein as the "Effective Time").

RESOLVED that, at the Effective Time, this Company, without further action, as provided by the laws of the State of Delaware, succeed to and possess all the rights, privileges, powers, and franchises, of a public as well as of a private nature, of the Subsidiary; and all property, real, personal and mixed, and all debts due on whatsoever account, including subscriptions to shares, and all other choses in action, and all and every other interest, of or belonging to or due to the Subsidiary shall be vested in this Company without further act or deed; and all property, rights, privileges, powers and franchises, and all and every other interest shall thereafter be as effectively the property of this Company as they were of the Subsidiary; and the title to any real estate, or any interest therein, vested in this Company or the Subsidiary by deed or otherwise shall not revert or be in any way impaired by reason of the Merger. This Company shall thereafter be responsible and liable for all debts, liabilities, and duties of the Subsidiary, which may be enforced against this Company to the same extent as if those debts, liabilities, and duties had been incurred or contracted by this Company. Neither the rights of creditors nor any liens upon the

property of the Subsidiary or this Company shall be impaired by the Merger.

RESOLVED that, at the Effective Time, each share of common stock of the Subsidiary be cancelled.

RESOLVED that, at the Effective Time, Article 1 of the Certificate of Incorporation of this Company be amended to read as follows:

"ARTICLE 1. NAME

The name of this corporation is El Paso Corporation."

RESOLVED that the proper officers of this Company be, and each of them hereby is, authorized and empowered to execute and acknowledge in the name and on behalf of this Company a Certificate of Ownership and Merger setting forth, among other things, a copy of these resolutions and the date of their adoption; and that each such officer is hereby authorized and directed to cause the executed Certificate of Ownership and Merger to be filed in the Office of the Secretary of State of the State of Delaware and to cause certified copies of that Certificate to be recorded in the Offices of the Recorder of Deeds of the appropriate counties, all in accordance with Sections 103 and 253 of the DGCL.

RESOLVED that the proper officers be, and each of them hereby is, authorized and empowered, in the name and on behalf of this Company, or any subsidiary of this Company, to do and perform, or cause to be done and performed, all such acts, deeds and things, to make, execute, and deliver, or cause to be made, executed, and delivered, all such agreements, guaranties, notes, evidences of borrowings, undertakings, documents, instruments and certificates as each such officer may deem necessary or appropriate to effectuate and carry out fully the purpose and intent of the foregoing resolutions.

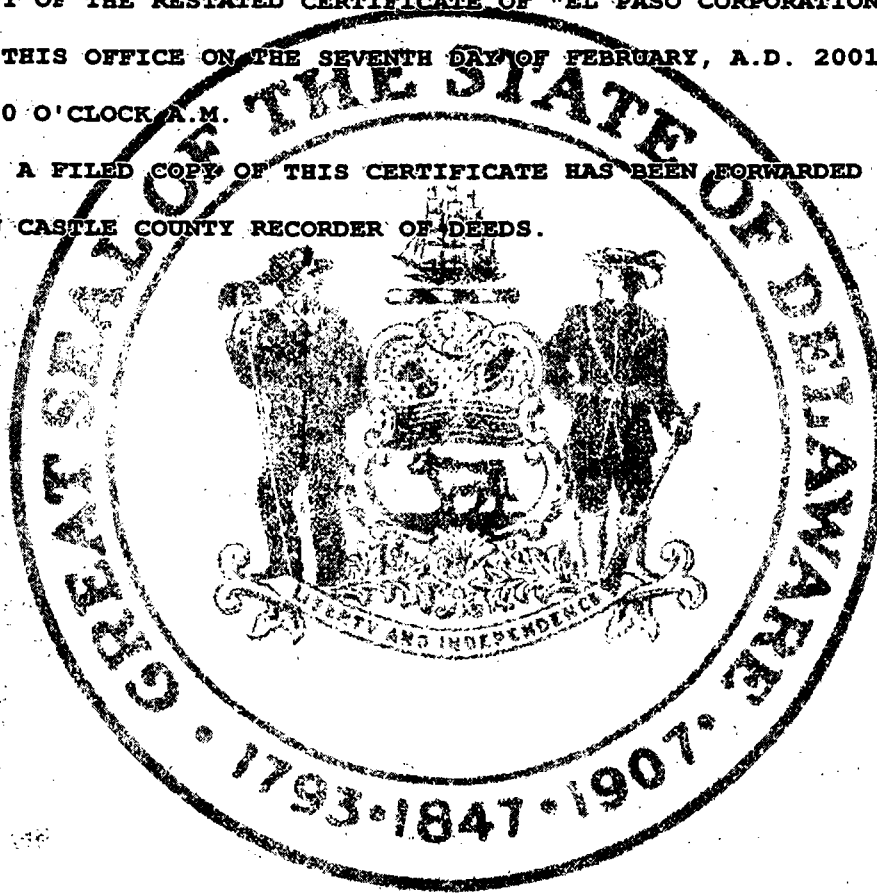
RESOLVED that at any time prior to the Effective Time, the Board of Directors of this Company may terminate the Merger and if, at the time of such termination, a Certificate of Ownership and Merger has been filed with the Secretary of State of the State of Delaware, any officer of this Company be, and each of them hereby is, authorized and directed to execute and acknowledge in the name and on behalf of this Company a Certificate of Termination.

RESOLVED that any and all actions heretofore taken by any officer of this Company, or any subsidiary of this Company, in connection with the foregoing resolutions be, and hereby are, ratified and approved.

Office of the Secretary of State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "EL PASO CORPORATION", FILED IN THIS OFFICE ON THE SEVENTH DAY OF FEBRUARY, A.D. 2001, AT 8:30 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Harriet Smith Windsor
Harriet Smith Windsor, Secretary of State

2884676 8100

AUTHENTICATION: 0959558

010061504

DATE: 02-07-01

RESTATED
CERTIFICATE OF INCORPORATION
OF
EL PASO CORPORATION

Pursuant to Section 245 of the
General Corporation Law of the State of Delaware

El Paso Corporation, a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

1. The original Certificate of Incorporation was filed with the Office of the Secretary of State of the State of Delaware on April 17, 1998. The name under which it was originally incorporated is El Paso Energy Corporation (the "Corporation").

2. This Restated Certificate of Incorporation has been adopted and approved in accordance with Section 245 of the Delaware General Corporation Law, and pursuant to Section 245 of the Delaware General Corporation Law, this Restated Certificate of Incorporation only restates and integrates and does not further amend the provisions of the Corporation's Restated Certificate of Incorporation as theretofore amended or supplemented, and there is no discrepancy between those provisions and the provisions of this Restated Certificate of Incorporation.

3. The text of the Restated Certificate of Incorporation is hereby restated and integrated to read in its entirety as follows:

ARTICLE 1. NAME

The name of this corporation is El Paso Corporation.

ARTICLE 2. REGISTERED OFFICE AND AGENT

The address of the registered office of this corporation is Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, State of Delaware 19801, and the name of its registered agent at such address is The Corporation Trust Company.

ARTICLE 3. PURPOSES

The purpose of this corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE 4. SHARES

4.1 The total number of authorized shares of all classes of stock of this corporation consist of 750,000,000 shares of common stock having a par value of \$3.00 per share (the "Common Stock") and 50,000,000 shares of preferred stock having a par value of \$0.01 per share ("Preferred Stock"). Authority is hereby expressly granted to the Board of Directors to fix by resolution or resolutions any of the designations and the powers, preferences and rights, and the qualifications, limitations or restrictions which are permitted by the General Corporation Law of the State of Delaware in respect of any class or classes of stock or any series of any class of stock of the corporation.

4.2 There shall be designated a series of the corporation's Preferred Stock, as follows:

4.2.1. Designation and Amount. The shares of such series shall be designated as "Series A Junior Participating Preferred Stock," par value \$.01 per share, and the number of shares constituting such series shall be 7,500,000. Such number of shares may be increased or decreased by resolution of the Board of Directors; provided, that no decrease shall reduce the number of shares of Series A Junior Participating Preferred Stock to a number less than that of the shares then outstanding plus the number of shares issuable upon exercise of outstanding rights, options or warrants or upon conversion of outstanding securities issued by the corporation.

4.2.2. Dividends and Distributions.

(A) Subject to the prior and superior rights of the holders of any shares of any series of Preferred Stock ranking prior and superior to the Series A Junior Participating Preferred Stock with respect to dividends, the holders of shares of Series A Junior Participating Preferred Stock in preference to the holders of shares of Common Stock and any other junior stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash on the first day of January, April, July, and October in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Junior Participating Preferred Stock in an amount per share (rounded to

the nearest cent) equal to the greater of (a) \$25, or (b) subject to the provision for adjustment hereinafter set forth, 200 times the aggregate per share amount of all cash dividends, and 200 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Junior Participating Preferred Stock. In the event the corporation shall at any time after July 22, 1998 (the "Rights Declaration Date") (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount to which holders of shares of Series A Junior Participating Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The corporation shall declare a dividend or distribution on the Series A Junior Participating Preferred Stock as provided in paragraph (A) above immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock); provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$25 per share on the Series A Junior Participating Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Junior Participating Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Junior Participating Preferred Stock unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Junior Participating Preferred Stock in an amount

less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Junior Participating Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 60 days prior to the date fixed for the payment thereof

4.2.3. Voting Rights. The holders of shares of Series A Junior Participating Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series A Junior Participating Preferred Stock shall entitle the holder thereof to 200 votes on all matters submitted to a vote of the stockholders of the corporation. In the event the corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the number of votes per share to which holders of shares of Series A Junior Participating Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) Except as otherwise provided herein or by law, the holders of shares of Series A Junior Participating Preferred Stock and the holders of shares of Common Stock shall vote together as one class on all matters submitted to a vote of stockholders of the corporation.

(C) (i) If at any time dividends on any Series A Junior Participating Preferred Stock shall be in arrears in an amount equal to six (6) quarterly dividends thereon, the occurrence of such contingency shall mark the beginning of a period (herein called a "default period") which shall extend until such time when all accrued and unpaid dividends for all previous quarterly dividend periods and for the current quarterly dividend period on all shares of Series A Junior Participating Preferred Stock then outstanding shall have been declared and paid or set apart for payment. During each default period, all holders of Preferred Stock (including holders of the Series A Junior Participating Preferred Stock) with dividends in arrears in an amount equal to six (6) quarterly dividends thereon, voting as a class, irrespective of series, shall have the right to elect two (2) Directors.

(ii) During any default period, such voting right of the holders of Series A Junior Participating Preferred Stock may be exercised initially at a special meeting called pursuant to subparagraph (iii) of this subsection 4.2.3(C) or at any annual meeting of stockholders, and thereafter at annual meetings of stockholders, provided that neither such voting right nor the right of the holders of any other series of Preferred Stock, if any, to increase in certain cases, the authorized number of Directors shall be exercised unless the holders of ten percent (10%) in number of shares of Preferred Stock outstanding shall be present in person or by proxy. The absence of a quorum of the holders of Common Stock shall not affect the exercise by the holders of Preferred Stock of such voting right. At any meeting at which the holders of Preferred Stock shall exercise such voting right initially during an existing default period, they shall have the right, voting as a class, to elect Directors to fill such vacancies, if any, in the Board of Directors as may then exist up to two (2) Directors or, if such right is exercised at an annual meeting, to elect two (2) Directors. If the number which may be so elected at any special meeting does not amount to the required number, the holders of the Preferred Stock shall have the right to make such increase in the number of Directors as shall be necessary to permit the election by them of the required number. After the holders of the Preferred Stock shall have exercised their right to elect Directors in any default period and during the continuance of such period, the number of Directors shall not be increased or decreased except by vote of the holders of Preferred Stock as herein provided or pursuant to the rights of any equity securities ranking senior to or pari passu with the Series A Junior Participating Preferred Stock.

(iii) Unless the holders of Preferred Stock shall, during an existing default period, have previously exercised their right to elect Directors, the Board of Directors may order, or any stockholder or stockholders owning in the aggregate not less than ten percent (10%) of the total number of shares of Preferred Stock outstanding, irrespective of series, may request, the calling of a special meeting of the holders of Preferred Stock, which meeting shall thereupon be called by the Chairman of the Board, the President or the Chief Executive Officer of the corporation. Notice of such meeting and of any annual meeting at which holders of Preferred Stock are entitled to vote pursuant to this paragraph (C)(iii) shall be given to each holder of record of Preferred Stock by mailing a copy of such notice to him at his last address as the same appears on the books of the corporation. Such meeting shall be called for a time not earlier than 10 days and not later than 60 days after such order or request or in default of the calling of such meeting within 60 days after such order or request, such meeting may be called on similar notice by any stockholder or stockholders owning in the aggregate not less than ten percent (10%) of the total number of shares of Preferred Stock outstanding. Notwithstanding the provisions of this paragraph (C)(iii), no such special meeting

shall be called during the period within 60 days immediately preceding the date fixed for the next annual meeting of the stockholders.

(iv) In any default period, the holders of Common Stock, and other classes of stock of the corporation if applicable, shall continue to be entitled to elect the whole number of Directors until the holders of Preferred Stock shall have exercised their right to elect two (2) Directors voting as a class, after the exercise of which right (x) the Directors so elected by the holders of Preferred Stock shall continue in office until their successors shall have been elected by such holders or until the expiration of the default period, and (y) any vacancy in the Board of Directors may (except as provided in paragraph (C)(ii) of this subsection 4.2.3) be filled by vote of a majority of the remaining Directors theretofore elected by the holders of the class of stock which elected the Director whose office shall become vacant. References in this paragraph (C) to Directors elected by the holders of a particular class of stock shall include Directors elected by such Directors to fill vacancies as provided in clause (y) of the foregoing sentence.

(v) Immediately upon the expiration of a default period, (x) the right of the holders of Preferred Stock as a class to elect Directors shall cease, (y) the term of any Directors elected by the holders of Preferred Stock as a class shall terminate, and (z) the number of Directors shall be such number as may be provided for in the Restated Certificate of Incorporation or By-laws irrespective of any increase made pursuant to the provisions of paragraph (C) (ii) of this subsection 4.2.3 (such number being subject, however, to change thereafter in any manner provided by law or in the Restated Certificate of Incorporation or By-laws). Any vacancies in the Board of Directors effected by the provisions of clauses (y) and (z) in the preceding sentence may be filled by a majority of the remaining Directors.

(D) Except as set forth herein, holders of Series A Junior Participating Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

4.2.4. Certain Restrictions.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Junior Participating Preferred Stock as provided in subsection 4.2.2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Junior Participating Preferred Stock outstanding shall have been paid in full, the corporation shall not:

(i) Declare or pay dividends on, make any other distributions on, or redeem or purchase or otherwise acquire for consideration any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock;

(ii) Declare or pay dividends on or make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Junior Participating Preferred Stock except dividends paid ratably on the Series A Junior Participating Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) Redeem or purchase or otherwise acquire for consideration shares of any stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Junior Participating Preferred Stock provided that the corporation may at any time redeem, purchase or otherwise acquire shares of any such parity stock in exchange for shares of any stock of the corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Junior Participating Preferred Stock; or

(iv) Purchase or otherwise acquire for consideration any shares of Series A Junior Participating Preferred Stock or any shares of stock ranking on a parity with the Series A Junior Participating Preferred Stock except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The corporation shall not permit any subsidiary of the corporation to purchase or otherwise acquire for consideration any shares of stock of the corporation unless the corporation could, under paragraph (A) of this subsection 4.2.4, purchase or otherwise acquire such shares at such time and in such manner.

4.2.5. Reacquired Shares. Any shares of Series A Junior Participating Preferred Stock purchased or otherwise acquired by the corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to the conditions and restrictions on issuance set forth herein.

4.2.6. Liquidation, Dissolution or Winding Up.

(A) Upon any liquidation (voluntary or otherwise), dissolution or winding up of the corporation, no distribution shall be made to the holders of shares of stock ranking junior (whether as to dividends or upon liquidation, dissolution or winding up) to the Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Series A Junior Participating Preferred Stock shall have received per share, the greater of 200 times \$75 or 200 times the payment made per share of Common Stock, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment (the "Series A Liquidation Preference"). Following the payment of the full amount of the Series A Liquidation Preference, no additional distributions shall be made to the holders of shares of Series A Junior Participating Preferred Stock unless, prior thereto, the holders of shares of Common Stock shall have received an amount per share (the "Common Adjustment") equal to the quotient obtained by dividing (i) the Series A Liquidation Preference by (ii) 200 (as appropriately adjusted as set forth in subparagraph C below to reflect such events as stock splits, stock dividends and recapitalizations with respect to the Common Stock) (such number in clause (ii), the "Adjustment Number"). Following the payment of the full amount of the Series A Liquidation Preference and the Common Adjustment in respect of all outstanding shares of Series A Junior Participating Preferred Stock and Common Stock, respectively, holders of Series A Junior Participating Preferred Stock and holders of shares of Common Stock shall receive their ratable and proportionate share of the remaining assets to be distributed in the ratio of the Adjustment Number to 1 with respect to such Preferred Stock and Common Stock, on a per share basis, respectively.

(B) In the event there are not sufficient assets available to permit payment in full of the Series A Liquidation Preference and the liquidation preferences of all other series of Preferred Stock, if any, which rank on a parity with the Series A Junior Participating Preferred Stock then such remaining assets shall be distributed ratably to the holders of such parity shares in proportion to their respective liquidation preferences. In the event there are not sufficient assets available to permit payment in full of the Common Adjustment, then such remaining assets shall be distributed ratably to the holders of Common Stock.

(C) In the event the corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the Adjustment Number in effect immediately prior to such event shall be adjusted by multiplying such Adjustment Number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after

such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

4.2.7. Consolidation, Merger, etc. If the corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property then in any such event the shares of Series A Junior Participating Preferred Stock shall at the same time be similarly exchanged or changed in an amount per share (subject to the provision for adjustment hereinafter set forth) equal to 200 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the corporation shall at any time after the Rights Declaration Date (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock, or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Junior Participating Preferred Stock shall be adjusted by multiplying such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that are outstanding immediately prior to such event.

4.2.8. Redemption. The shares of Series A Junior Participating Preferred Stock shall not be redeemable.

4.2.9. Ranking. The Series A Junior Participating Preferred Stock shall rank junior to all other series of the corporation's Preferred Stock as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.

4.2.10. Fractional Shares. Series A Junior Participating Preferred Stock may be issued in fractions of a share which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series A Junior Participating Preferred Stock.

4.3 There shall be designated a series of the corporation's Preferred Stock, as follows:

Section 1. Designation and Amount. There shall be a series of Preferred Stock of the Company which shall be designated as "Series B Mandatorily Convertible Single Reset Preferred Stock", par value \$.01 per share, and the number of shares initially constituting such series shall be 200,000. Such number of shares may be increased by resolution of the Board of Directors to the extent necessary to fulfill

the Company's obligations to issue additional shares of Series B Mandatorily Convertible Single Reset Preferred Stock pursuant to the Remarketing Agreement (as defined in Section 2 hereof). Such number of shares may be decreased by resolution of the Board of Directors, provided that no decrease shall reduce the number of shares of Series B Mandatorily Convertible Single Reset Preferred Stock to a number less than that of the number of shares then outstanding.

Section 2. Definitions. Capitalized terms used herein which are not otherwise defined herein shall have the meaning ascribed thereto in the Company's Restated Certificate of Incorporation. In addition, the following terms shall have the following meanings when used herein:

"Average Trading Price" for a security for any given period means an amount equal to (i) the sum of the Closing Price for such security on each Trading Day in such period divided by (ii) the total number of Trading Days in such period.

"Board of Directors" shall mean the Board of Directors of the Company.

"Business Day" shall mean any day other than a Saturday, Sunday, or a day on which commercial banking institutions in the State of New York or the State of Texas are authorized or obligated by law or executive order to close.

"Closing Price" for a security means the closing price for such security on the Trading Day in question (or if such day is not a Trading Day then as of the Trading Day next preceding such day) as reported by Bloomberg L.P., or if not so reported by Bloomberg L.P., as reported by another recognized source selected by the Board of Directors.

"Common Stock" shall have the meaning specified in Subsection 6(9) hereof

"Dividend Payment Date" shall have the meaning specified in Subsection 3(1) hereof

"Failed Remarketing" shall have the meaning ascribed to such term in the Remarketing Agreement.

"Final Sale Date" shall have the meaning ascribed to such term in the Remarketing Agreement.

"junior stock" shall mean (and references to shares ranking "junior to" the Series B Mandatorily Convertible Single Reset Preferred Stock shall refer to),

with respect to Sections 3 and 7 hereof, the Series A Junior Participating Preferred Stock of the Company, the Common Stock and any other class or series of stock of the Company which by its terms is not entitled to receive any dividends unless all dividends required to have been paid or declared and set apart for payment on the Series B Mandatorily Convertible Single Reset Preferred Stock shall have been so paid or declared and, with respect to Sections 4 and 7 hereof, the Series A Junior Participating Preferred Stock of the Company, the Common Stock and any other class or series of stock of the Company which by its terms is not entitled to receive any assets upon the liquidation, dissolution or winding up of the affairs of the Company until holders of the Series B Mandatorily Convertible Single Reset Preferred Stock shall have received the entire amount to which such holders are entitled upon liquidation, dissolution or winding up.

"Limestone Note Trigger Event" shall have the meaning ascribed to such term in the Remarketing Agreement.

"Mandatory Conversion" shall have the meaning specified in Subsection 6(1) hereof.

"Mandatory Conversion Date" shall have the meaning specified in Subsection 6(1) hereof.

"Mandatory Conversion Date Market Price" shall have the meaning specified in Subsection 6(1) hereof.

"Mandatory Conversion Rate" shall have the meaning specified in Subsection 6(1) hereof.

"Optional Conversion" shall have the meaning specified in Subsection 6(2) hereof.

"Optional Conversion Rate" shall have the meaning specified in Subsection 6(2) hereof.

"parity stock" shall mean (and references to shares ranking "on a parity with" the Series B Mandatorily Convertible Single Reset Preferred Stock shall refer to), with respect to Sections 3 and 7 hereof, any class or series of stock of the Company which by its terms is entitled to receive payment of dividends on a parity with the Series B Mandatorily Convertible Single Reset Preferred Stock and, with respect to Sections 4 and 7 hereof, any class or series of stock of the Company the holders of which by its terms are entitled to receive assets upon the liquidation, dissolution or winding up of the affairs of the Company on a parity

with the holders of Series B Mandatorily Convertible Single Reset Preferred Stock.

"Principal Market" shall have the meaning ascribed to such term in the Remarketing Agreement.

"Rate Reset Date" means the earlier to occur of (A) the consummation of the remarketing of the Initial Shares (as such term is defined in the Remarketing Agreement), which is expected to be on or about the third Trading Day following the Successful Repricing Date, and (B) the date of a Failed Remarketing.

"Redemption Event" means the occurrence of any of the following: (i) any consolidation or merger of the Company with or into another corporation or entity, unless in connection with such consolidation or merger the outstanding shares of Common Stock immediately preceding the consummation of such consolidation or merger are converted into, exchanged for or otherwise represent a majority of the outstanding shares of common stock of the surviving or resulting corporation or entity immediately succeeding the consummation of such consolidation or merger or (ii) the Company sells or conveys to another entity (other than a Subsidiary) all or substantially all of the assets of the Company.

"Remarketing Agent" shall have the meaning ascribed to such term in the Remarketing Agreement.

"Remarketing Agreement" shall mean the El Paso Preferred Stock Remarketing and Registration Rights Agreement dated as of March 27, 2000 among the Company, El Paso Electron Share Trust, Limestone Electron Trust, United States Trust Company of New York, as Indenture Trustee, and Donaldson, Lufkin & Jenrette Securities Corporation, as Initial Remarketing Agent.

"Reset Common Yield" shall mean the quotient of (i) the product of (x) 4 and (y) the amount of the ordinary quarterly cash dividend on one share of Common Stock most recently declared prior to the Trigger Date (as appropriately adjusted for the events referred to in Subsection 6(3)(a)), unless subsequent to such declaration and prior to the Trigger Date, the Company has publicly announced a change to, or elimination of, its ordinary quarterly cash dividend (including a filing with the Securities and Exchange Commission including such change or elimination), in which case clause (y) above shall be the amount of such proposed ordinary quarterly cash dividend (or \$0.00 if such dividend is to be eliminated), divided by (ii) the Reset Price (provided, however, that if as of the Trigger Date there is more than one class of Common Stock, then the Reset Common Yield shall be calculated with respect to each then outstanding class of Common Stock, and the Reset Common Yield (as used herein) shall be the

amount calculated with respect to the class of Common Stock resulting in the greatest Reset Common Yield).

"Reset Dividend Rate" shall mean an amount per annum per share equal to the product of (i) the sum of (x) the Reset Common Yield (expressed as a percentage), plus (y) 7% and (ii) \$5,000.00 (rounded to the nearest cent).

"Reset Price" shall mean the higher of (i) the Closing Price of a share of Common Stock on the Trigger Date or (ii) the quotient (rounded up to the nearest cent) of \$1,000,000,000 divided by the number, as of the Trigger Date, of the authorized but unissued shares of Common Stock that have not been reserved as of the Trigger Date by the Board of Directors for other purposes, subject to adjustment as provided in Subsection 6(3)(a) hereof

"Rights" means rights or warrants distributed by the Company under a shareholder rights plan or agreement to all holders of Common Stock entitling the holders thereof to subscribe for or purchase shares of the Company's capital stock (either initially or under certain circumstances), which rights or warrants, until the occurrence of a specified event or events ("Rights Events"), (i) are deemed to be transferred with such shares of Common Stock, (ii) are not exercisable and (iii) are also issued in respect of future issuances of Common Stock.

"Rights Events" shall have the meaning ascribed to such term in the definition of Rights.

"senior stock" shall mean (and references to shares ranking "senior to" or "prior to" the Series B Mandatorily Convertible Single Reset Preferred Stock shall refer to), with respect to Sections 3 and 7 hereof, any class or series of stock of the Company by its terms ranking senior to the Series B Mandatorily Convertible Single Reset Preferred Stock in respect of the right to receive dividends and, with respect to Sections 4 and 7 hereof, any class or series of stock of the Company by its terms ranking senior to the Series B Mandatorily Convertible Single Reset Preferred Stock with respect to the right of the holders thereof to receive assets upon the liquidation, dissolution or winding up of the affairs of the Company.

"Subsidiary" means any corporation or other entity of which the Company owns, directly or indirectly sufficient securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other individuals performing similar functions.

"Successful Repricing Date" shall have the meaning ascribed to such term in the Remarketing Agreement.

"Threshold Appreciation Price" means the product of (i) the Reset Price as of the time in question and (ii) 1.10.

"Trading Day" means a day on which the Principal Market with respect to a security is regularly scheduled to be open for trading. For purposes of this definition, a day on which any such exchange is scheduled to close (as opposed to unexpectedly closing) prior to its regular closing time shall not constitute a Trading Day.

"Trigger Date" shall mean the earlier to occur of (A) the Successful Repricing Date and (B) the date of a Failed Remarketing.

Section 3. Dividends.

(1) The holders of the Series B Mandatorily Convertible Single Reset Preferred Stock shall not be entitled to receive any dividends (nor shall dividends commence to accrue) prior to, or with respect to any period ending prior to, the Rate Reset Date. The holders of the Series B Mandatorily Convertible Single Reset Preferred Stock, in preference to the rights of holders of any junior stock but subject to the rights of holders of any senior stock and parity stock, shall be entitled to receive, when, as and if declared by the Board of Directors out of any funds legally available therefor cumulative cash dividends from the Rate Reset Date at the Reset Dividend Rate, and no more, payable on the dates as set forth in this Section 3. Dividends shall accrue on the Series B Mandatorily Convertible Single Reset Preferred Stock from the Rate Reset Date. Dividends shall be payable quarterly in arrears on each January 1, April 1, July 1, and October 1 commencing on the first such date following the Rate Reset Date (each such date being hereinafter referred to as a "Dividend Payment Date"); provided, that if any such Dividend Payment Date is not a Business Day, then any payment with respect to such Dividend Payment Date shall be payable on the next succeeding Business Day. Each such dividend shall be payable to holders of record as they appear on the books of the Company or any transfer agent for the Series B Mandatorily Convertible Single Reset Preferred Stock on such record dates as shall be fixed by the Board of Directors subject to applicable law (which record date shall be no more than 60 days prior to the date fixed for the payment thereof). Dividends on the Series B Mandatorily Convertible Single Reset Preferred Stock shall accrue on a daily basis commencing on and including the Rate Reset Date, and accrued dividends for each dividend period or portion thereof shall cumulate, to the extent not paid, as of the date on which such dividends were to have been paid. A dividend period shall commence on a Dividend Payment Date or the Rate Reset Date, as the case may be, and continue to the day next preceding the next succeeding Dividend Payment Date. Accumulated unpaid dividends shall not accrue interest. Dividends (or cash amounts equal to accrued and unpaid

dividends) payable on the Series B Mandatorily Convertible Single Reset Preferred Stock for any period less than or more than a full quarterly period shall be computed on the basis of a 360-day year of twelve 30-day months and the actual number of days elapsed in any period less than one month. Dividends on the Series B Mandatorily Convertible Single Reset Preferred Stock shall accrue whether or not the Company has earnings, whether or not there are funds legally available for the payment of such dividends and whether or not such dividends are declared. Dividends in arrears for any past dividend periods or portions thereof may be declared and paid at any time without reference to any regular Dividend Payment Date to holders of record on such date as shall be fixed by the Board of Directors subject to applicable law. As provided in Subsection 6(1), dividends on the Series B Mandatorily Convertible Single Reset Preferred Stock shall cease to accrue on the day immediately preceding the Mandatory Conversion Date and, in the case of an Optional Redemption of the Series B Mandatorily Convertible Single Reset Preferred Stock, dividends shall accrue only to the extent provided in Subsection 6(2).

(2) As long as any shares of Series B Mandatorily Convertible Single Reset Preferred Stock are outstanding, no dividends or other distributions for any dividend period (other than dividends or other distributions payable in shares of, or warrants, rights or options exercisable for or convertible into, junior stock, and cash in lieu of fractional shares of such junior stock in connection with any such dividend or distribution) will be paid on any junior stock unless: (i) full dividends, if any, on all outstanding shares of senior stock, parity stock and Series B Mandatorily Convertible Single Reset Preferred Stock have been paid, or declared and set aside for payment, for all dividend periods terminating on or prior to the payment date of such junior stock dividend or distribution, to the extent such dividends on senior stock, parity stock or Series B Mandatorily Convertible Single Reset Preferred Stock are cumulative; (ii) the Company has paid or set aside all amounts, if any, then or theretofore required to be paid or set aside for all purchase, retirement, and sinking funds, if any, for any outstanding shares of senior stock or parity stock; and (iii) the Company is not in default on any of its obligations to redeem any outstanding shares of senior stock or parity stock.

In addition, as long as any Series B Mandatorily Convertible Single Reset Preferred Stock is outstanding, no shares of any junior stock may be purchased, redeemed, or otherwise acquired by the Company or any Subsidiary (except in connection with a reclassification or exchange of any junior stock through the issuance of other junior stock and cash in lieu of fractional shares of such junior stock in connection therewith) and except for the acquisition of shares of any junior stock pursuant to contractual obligations binding against the Company or any Subsidiary that were entered into prior to the date of the first issuance of shares of Series B Mandatorily Convertible Single Reset Preferred Stock or

pursuant to contractual obligations that are entered into at a time subsequent thereto when such acquisitions of shares could be made pursuant to this Subsection 6(2) nor may any funds be set aside or made available for any sinking fund for the purchase or redemption of any junior stock unless: (i) full dividends, if any, on all outstanding shares of senior stock, parity stock and Series B Mandatorily Convertible Single Reset Preferred Stock have been paid, or declared and set aside for payment, for all dividend periods terminating on or prior to the date of such purchase, redemption or acquisition, to the extent dividends on such senior stock, parity stock or Series B Mandatorily Convertible Single Reset Preferred Stock dividends are cumulative, (ii) the Company has paid or set aside all amounts, if any, then or theretofore required to be paid or set aside for all purchase, retirement, and sinking funds, if any, for any outstanding shares of senior stock or parity stock; and (iii) the Company is not in default on any of its obligations to redeem any outstanding shares of senior stock or parity stock. Subject to the provisions described above, such dividends or other distributions (payable in cash, property, or junior stock) as may be determined from time to time by the Board of Directors may be declared and paid on the shares of any junior stock and from time to time junior stock may be purchased, redeemed or otherwise acquired by the Company or any Subsidiary. In the event of the declaration and payment of any such dividends or other distributions, the holders of such junior stock will be entitled, to the exclusion of holders of any outstanding senior stock or parity stock, to share therein according to their respective interests.

(3) As long as any Series B Mandatorily Convertible Single Reset Preferred Stock is outstanding, dividends or other distributions for any dividend period may not be paid on any outstanding shares of parity stock (other than dividends or other distributions payable in shares of, or warrants, rights or options exercisable for or convertible into, parity stock or junior stock and cash in lieu of fractional shares of such parity stock or junior stock in connection with any such dividend), unless either: (a)(i) full dividends, if any, on all outstanding shares of senior stock, parity stock and Series B Mandatorily Convertible Single Reset Preferred Stock have been paid, or declared and set aside for payment, for all dividend periods terminating on or prior to the payment date of such dividend or distribution with respect to such senior stock, parity stock or Series B Mandatorily Convertible Single Reset Preferred Stock, to the extent dividends on such senior stock, parity stock or Series B Mandatorily Convertible Single Reset Preferred Stock are cumulative; (ii) the Company has paid or set aside all amounts, if any, then or theretofore required to be paid or set aside for all purchase, retirement and sinking funds, if any, for any outstanding shares of senior stock or parity stock; and (iii) the Company is not in default on any of its obligations to redeem any outstanding shares of senior stock or parity stock; or (b) any such dividends are declared and paid pro rata so that the amounts of any dividends declared and paid per share on outstanding Series B Mandatorily Convertible Single Reset Preferred

Stock and each share of such parity stock will in all cases bear to each other the same ratio that accrued and unpaid dividends (including any accumulation with respect to unpaid dividends for prior dividend periods, if such dividends are cumulative) per share of outstanding Series B Mandatorily Convertible Single Reset Preferred Stock and such outstanding shares of parity stock bear to each other.

In addition, as long as any Series B Mandatorily Convertible Single Reset Preferred Stock is outstanding, no shares of any parity stock may be purchased, redeemed or otherwise acquired by the Company or any Subsidiary (except with any parity stock, junior stock and cash in lieu of fractional shares of such parity stock or junior stock in connection therewith and except for the acquisition of shares of any parity stock pursuant to contractual obligations binding against the Company or any Subsidiary that were entered into prior to the date of the first issuance of shares of Series B Mandatorily Convertible Single Reset Preferred Stock or pursuant to contractual obligations that are entered into at a time subsequent thereto when such acquisitions of shares could be made pursuant to this Subsection 6(3)) unless: (i) full dividends, if any, on all outstanding shares of senior stock, parity stock and Series B Mandatorily Convertible Single Reset Preferred Stock have been paid, or declared and set aside for payment, for all dividend periods terminating on or prior to the date of such purchase, redemption or other acquisition, to the extent dividends on such senior stock, parity stock or Series B Mandatorily Convertible Single Reset Preferred Stock are cumulative; (ii) the Company has paid or set aside all amounts, if any, then or theretofore required to be paid or set aside for all purchase, retirement, and sinking funds, if any, for any outstanding shares of senior stock or parity stock; and (iii) the Company is not in default of any of its obligations to redeem any outstanding shares of senior stock or parity stock.

(4) Any dividend payment made on the Series B Mandatorily Convertible Single Reset Preferred Stock shall first be credited against the earliest accrued but unpaid dividend due with respect to the Series B Mandatorily Convertible Single Reset Preferred Stock.

(5) All dividends paid with respect to the Series B Mandatorily Convertible Single Reset Preferred Stock shall be paid pro rata to the holders entitled thereto.

Section 4. Liquidation Preference. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Company, then, before any distribution or payments shall be made to the holders of any junior stock, but subject to the rights of any senior stock or parity stock, the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock shall be entitled to be paid in full in cash the amount of \$5,000.00 per share, together with, to the extent

lawful, accrued dividends to the date of such distribution or payment, whether or not earned or declared. If such payment shall have been made in full to the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock and all preferential payments or distributions to be made with respect to senior stock and parity stock have been made in full, the remaining assets and funds of the Company shall be distributed among the holders of the junior stock, according to their respective rights and preferences and in each case according to their respective shares. If, upon any liquidation, dissolution or winding up of the affairs of the Company, the amounts so payable are not paid in full to the holders of all shares of the Series B Mandatorily Convertible Single Reset Preferred Stock and parity stock, the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock, together with holders of parity stock, shall share ratably in any distribution of assets in proportion to the full amounts to which they would otherwise be respectively entitled. Neither the consolidation or merger of the Company with another entity, nor the sale, lease, transfer, exchange or conveyance of all or a part of its assets, shall be deemed a liquidation, dissolution or winding up of the affairs of the Company within the meaning of the foregoing provisions of this Section 4.

Section 5. Redemption. The Company shall have the right to redeem all, but not less than all, of the outstanding Series B Mandatorily Convertible Single Reset Preferred Stock (x) at any time following a Redemption Event and prior to a Trigger Date and (y) at any time prior to a Limestone Note Trigger Event, in each case in cash at the redemption price of \$5,000.00 per share (the "Redemption Price"). Except as set forth in the preceding sentence and to the extent contemplated by Section 6(1)(y), the Company shall not have the right to redeem any or all of the Series B Mandatorily Convertible Single Reset Preferred Stock at any other time. Notice of a redemption of the Series B Mandatorily Convertible Single Reset Preferred Stock shall be provided in writing to the holders of record of such shares at their respective addresses as they shall appear on the books of the Company at least two Business Days and not more than 60 calendar days prior to the date fixed for redemption. Each such notice of redemption shall specify the date fixed for redemption and the Redemption Price. On or after the date fixed for redemption as stated in such notice, each holder of the shares called for redemption shall surrender the certificate evidencing such shares to the Company and shall thereupon be entitled to receive payment of the Redemption Price. If, on the date fixed for redemption, funds necessary for the redemption shall be available therefor and shall have been irrevocably deposited or set aside, then, notwithstanding that the certificates evidencing any shares so called for redemption shall not have been surrendered, the shares shall no longer be deemed outstanding, and all rights whatsoever with respect to the shares so called for redemption (except the right of the holders to receive the Redemption Price without interest upon surrender of their certificates therefor) shall terminate.

Section 6. Conversion.

(1) Unless previously converted at the option of the holder in accordance with the provisions hereof, on the earlier to occur of (i) the third anniversary of the Rate Reset Date and (ii) March 15, 2006, or if such date is not a Business Day, the next succeeding day that is a Business Day (the "Mandatory Conversion Date"), each outstanding share of Series B Mandatorily Convertible Single Reset Preferred Stock shall, without additional notice to holders thereof, convert automatically (the "Mandatory Conversion") into (x) a number of fully paid and non-assessable shares of Common Stock at the Mandatory Conversion Rate (as defined herein) in effect on the Mandatory Conversion Date; and (y) the right to receive an amount in cash equal to all accrued and unpaid dividends on such share of Series B Mandatorily Convertible Single Reset Preferred Stock (other than previously declared dividends payable to a holder of record as of a prior date) to and including the day immediately prior to the Mandatory Conversion Date, whether or not earned or declared, out of funds legally available therefor (and if sufficient funds are not then legally available therefor, the Company shall pay such amount, if any, pro rata (based on the amounts so owing) to the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock and any parity stock then entitled to similar payment as is then legally available therefor and shall pay any deficiency thereafter as soon as funds are legally available therefor). The "Mandatory Conversion Rate" is equal to the following number of shares of Common Stock per share of Series B Mandatorily Convertible Single Reset Preferred Stock: (a) if the Mandatory Conversion Date Market Price is greater than or equal to the Threshold Appreciation Price, the quotient of (i) \$5,000.00 divided by (ii) the Threshold Appreciation Price, (b) if the Mandatory Conversion Date Market Price is less than the Threshold Appreciation Price but is greater than the Reset Price, the quotient of \$5,000.00 divided by the Mandatory Conversion Date Market Price and (c) if the Mandatory Conversion Date Market Price is less than or equal to the Reset Price, the quotient of \$5,000.00 divided by the Reset Price, subject to adjustment as provided in this Section 6. "Mandatory Conversion Date Market Price" shall mean the Average Trading Price per share of Common Stock for the 20 consecutive Trading Days immediately prior to, but not including, the Mandatory Conversion Date; provided, however, that if an event occurs during such 20 consecutive Trading Days that would require an adjustment to the Mandatory Conversion Rate pursuant to Subsections 6(3) or 6(5), the Board of Directors may make such adjustments to the Average Trading Price for shares of Common Stock for such 20 Trading Day period as it reasonably deems appropriate to effectuate the intent of the adjustments in Subsections 6(3) and 6(5), in which case any such determination by the Board of Directors shall be set forth in a resolution of the Board of Directors and shall be conclusive absent manifest error.

Dividends on the Series B Mandatorily Convertible Single Reset Preferred Stock shall cease to accrue on the day immediately preceding, and the Series B Mandatorily Convertible Single Reset Preferred Stock shall cease to be outstanding on, the Mandatory Conversion Date. The Company shall make arrangements as it deems appropriate for the issuance of certificates representing Common Stock and for the payment of cash in respect of such accrued and unpaid dividends, if any, or cash in lieu of fractional shares, if any, in exchange for and contingent upon surrender of certificates representing the Series B Mandatorily Convertible Single Reset Preferred Stock, and the Company may defer the payment of dividends on such Common Stock and the voting thereof until, and make such payment and voting contingent upon, the surrender of such certificates representing the Series B Mandatorily Convertible Single Reset Preferred Stock, provided that the Company shall give the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock such notice of any such actions as the Company deems appropriate and upon such surrender such holders shall be entitled to receive such dividends declared and paid on such Common Stock subsequent to the Mandatory Conversion Date. Amounts payable in cash in respect of the Series B Mandatorily Convertible Single Reset Preferred Stock or in respect of such Common Stock shall not bear interest.

(2) Shares of Series B Mandatorily Convertible Single Reset Preferred Stock shall be convertible, at the option of the holders thereof ("Optional Conversion") at any time on or after the Rate Reset Date and before the Mandatory Conversion Date, into Common Stock at a rate equal to the number of shares of Common Stock per share of Series B Mandatorily Convertible Single Reset Preferred Stock (the "Optional Conversion Rate") equal to the quotient of (i) \$5,000.00 divided by (ii) the Threshold Appreciation Price, subject to adjustment as set forth in this Section 6. Prior to the Rate Reset Date, the Optional Conversion Rate shall be 122.231 shares of Common Stock for each share of Series B Mandatorily Convertible Single Reset Preferred Stock, subject to adjustment as set forth in this Section 6. Optional Conversion of shares of Series B Mandatorily Convertible Single Reset Preferred Stock may be effected by delivering certificates evidencing such shares of Series B Mandatorily Convertible Single Reset Preferred Stock, together with written notice of conversion and, if required by the Company, a proper assignment of such certificates to the Company or in blank (and, if applicable as provided in the following paragraph, cash payment of an amount equal to the dividends attributable to the current dividend period payable on such shares), to the office of the transfer agent for the shares of Series B Mandatorily Convertible Single Reset Preferred Stock or to any other office or agency maintained by the Company for that purpose and otherwise in accordance with Optional Conversion procedures established by the Company. Each Optional Conversion shall be deemed to have been effected immediately before the close of

business on the date on which the foregoing requirements shall have been satisfied. The Optional Conversion shall be at the Optional Conversion Rate in effect at such time and on such date.

Holders of shares of Series B Mandatorily Convertible Single Reset Preferred Stock at the close of business on a record date for any payment of declared dividends shall be entitled to receive the dividend payable on such shares on the corresponding Dividend Payment Date or other date fixed for payment of dividends notwithstanding the Optional Conversion of such shares following such record date and on or prior to such Dividend Payment Date or other date fixed for payment of dividends. However, shares of Series B Mandatorily Convertible Single Reset Preferred Stock surrendered for Optional Conversion after the close of business on a record date for any payment of declared dividends and before the opening of business on the next succeeding Dividend Payment Date or other date fixed for payment of dividends must be accompanied by payment in cash of an amount equal to the dividends attributable to the current dividend period payable on such shares on such next succeeding Dividend Payment Date or other date fixed for payment of dividends. Except as provided in this Subsection 6(2), upon any Optional Conversion, the Company shall make no payment of or allowance for unpaid dividends, whether or not in arrears, on such converted shares of Series B Mandatorily Convertible Single Reset Preferred Stock as to which Optional Conversion has been effected or for previously declared dividends or distributions on the shares of Common Stock issued upon such Optional Conversion.

(3) The Optional Conversion Rate shall be adjusted from time to time and the Mandatory Conversion Rate shall be adjusted from time to time after the Rate Reset Date in respect of events occurring after the Rate Reset Date, as follows:

(a) In case the Company shall (i) pay a dividend on its Common Stock in other Common Stock, (ii) subdivide or split its outstanding Common Stock into a greater number of shares, (iii) combine its outstanding Common Stock into a smaller number of Common Stock, or (iv) issue by reclassification of its Common Stock any other Common Stock (including in connection with a merger in which the Company is a surviving corporation), then, in any such event, (1) the Mandatory Conversion Rate in effect immediately prior to such event shall be adjusted such that the Reset Price shall be adjusted by multiplying it by a fraction (which fraction and all other fractions referred to herein may be improper fractions), the numerator of which is one and the denominator of which is the number of shares of Common Stock that a holder of one share of Common Stock prior to any event described above would hold after such event (assuming the issuance of fractional shares) (the "Recapitalization Adjustment Ratio"), and (2) the Optional Conversion Rate in effect immediately prior to such event shall be adjusted by multiplying it by a fraction, the numerator of which is one and the

denominator of which is the Recapitalization Adjustment Ratio. Such adjustment shall become effective immediately after the effective date of any such event (or the earlier record date in the case of any such dividend) whenever any of the events listed above shall occur.

(b) In case the Company shall issue rights or warrants to all holders of its Common Stock entitling them (for a period, except in the case of Rights, expiring within 45 days after the record date for determination of the shareholders entitled to receive such rights or warrants) to subscribe for or purchase Common Stock at a price per share of Common Stock less than the current market price per share of Common Stock (as defined in Subsection 6(4)) on such record date, then in each such case the Mandatory Conversion Rate on the date of such issuance shall be adjusted such that the Reset Price shall be adjusted by multiplying it by a fraction the numerator of which shall be the sum of (x) the number of shares of Common Stock outstanding immediately prior to such issuance, plus (y) the number of additional shares of Common Stock which the aggregate offering price of the total number of shares of Common Stock so offered for subscription or purchase would purchase at the Average Trading Price for a share of Common Stock on the record date for such issuance, and the denominator of which shall be the sum of (x) the number of shares of Common Stock outstanding immediately prior to such issuance, plus (y) the number of additional shares of Common Stock offered for subscription or purchase pursuant to such rights or warrants (the "Anti-Dilution Adjustment Ratio"); and (B) the Optional Conversion Rate in effect on the record date described below shall be adjusted by multiplying it by a fraction, the numerator of which is one and the denominator of which is the Anti-Dilution Adjustment Ratio. For purposes of this Subsection 6(3)(b), the issuance of rights or warrants to subscribe for or purchase securities exercisable for, convertible into, or exchangeable for, shares of Common Stock shall be deemed to be the issuance of rights or warrants to purchase the shares of Common Stock into which such securities are exercisable, convertible or exchangeable at an aggregate offering price equal to the aggregate offering price of such securities plus the minimum aggregate amount (if any) payable upon the exercise, conversion or exchange of such securities. Such adjustment shall become effective at the opening of business on the Business Day next following the record date for such rights or warrants. To the extent that any shares of Common Stock, or securities exercisable for, convertible into, or exchangeable for, shares of Common Stock so offered for subscription or purchase are not so subscribed or purchased by the expiration of such rights or warrants, the Mandatory Conversion Rate and the Optional Conversion Rate shall each be readjusted to the rates or amounts, respectively, which would then be in effect, had the adjustment made upon the issuance of such rights or warrants been made upon the basis of the issuance of rights or warrants in respect of only the number of shares of Common Stock and

securities exercisable for, convertible into, or exchangeable for, shares of Common Stock actually issued upon exercise of such rights or warrants.

(c) If the Company shall pay a dividend or make a distribution to all holders of its Common Stock consisting of evidences of its indebtedness or other assets (including capital shares of the Company other than Common Stock but excluding any Ordinary Cash Dividends (as defined below)), or shall issue to all holders of its Common Stock rights or warrants to subscribe for or purchase any of its securities (other than those referred to in Subsection 6(b)), then in each such case the Mandatory Conversion Rate in effect immediately prior to such event shall be adjusted such that the Reset Price shall be adjusted by multiplying it by a fraction, the numerator of which shall be the Average Trading Price for a share of Common Stock on such record date, minus the fair market value as of such record date of the portion of evidences of indebtedness or other assets so distributed, or of such subscription rights or warrants, applicable to one share of Common Stock (provided that such numerator shall never be less than \$1.00) and the denominator of which shall be the Average Trading Price for a share of Common Stock on such record date (the "Distribution Adjustment Ratio"); and (B) the Optional Conversion Rate in effect immediately prior to such event shall be adjusted by multiplying it by a fraction, the numerator of which is one and the denominator of which is the Distribution Adjustment Ratio. Such adjustment shall become effective on the opening of business on the Business Day next following the record date for such dividend or distribution or the determination of shareholders entitled to receive such dividend or distribution or rights or warrants, as the case may be. "Ordinary Cash Dividends" shall mean (i) any regular cash dividend on the Common Stock that does not exceed the per share amount of immediately preceding regular cash dividend on the Common Stock (as adjusted to appropriately reflect any of the events referred to in Subsection 6(3)(a)) and (ii) any other cash dividend or distribution which, when combined on a per share basis with the per share amount of all other cash dividends and distributions paid on the Common Stock during the 365-day period ending on the date of declaration of such dividend or distribution (as adjusted to appropriately reflect any of the events referred to in Subsection 6(3)(a) and excluding cash dividends or distributions that resulted in an adjustment to the Mandatory Conversion Rate or the Optional Conversion Rate), does not exceed 10% of the current market price per Common Stock (determined pursuant to Subsection 6(4)) on the Trading Day immediately preceding the date of declaration of such dividend or distribution.

(4) For the purpose of any computation under Subsection 6(3), the "current market price per share of Common Stock" on any date in question shall mean the Average Trading Price for shares of Common Stock for the 15 consecutive Trading Days ending on the earlier of the day in question and, if applicable, the day before the "ex" date with respect to the issuance or distribution requiring such

computation; provided, however, that if another event occurs that would require an adjustment pursuant to Subsection 6(3), the Board of Directors may make such adjustments to the Average Trading Price for shares of Common Stock during such 15 Trading Day period as it reasonably deems appropriate to effectuate the intent of the adjustments in Subsection 6(3), in which case any such determination by the Board of Directors shall be set forth in a Board resolution and shall be conclusive absent manifest error. For purposes of this Subsection, the term "ex" date, when used with respect to any issuance or distribution, means the first date on which the shares of Common Stock trade regular way on the relevant exchange or in the relevant market from which the Average Trading Price was obtained without the right to receive such issuance or distribution. For the purpose of any computation under Subsection 6(3), the "fair market value" of any assets, evidences of indebtedness, subscription rights or warrants on any date in question: (i) in the event any such item is a publicly traded security ("Publicly Traded Security"), shall be determined for such date pursuant to the provisions of this Subsection 6(4) for determination of the "current market price per share of Common Stock", except that (x) each reference therein to "Common Stock" shall be deemed to mean such Publicly Traded Security, and (y) if such Publicly Traded Security does not trade on a "when issued" basis for the 15 consecutive Trading Days preceding the "ex" date, such determination shall be made for the period of 15 consecutive Trading Days commencing on the "ex" date; and (ii) in the event any such item is not a Publicly Traded Security, shall be reasonably determined in good faith for such date by the Board of Directors, as evidenced by a resolution of the Board, whose determination shall be conclusive absent manifest error.

(5) In any case of any reclassification of Common Stock (other than a reclassification of the Common Stock referred to in Subsection 6(3)(a)); any consolidation or merger of the Company with or into another company or other entity (other than a merger resulting in a reclassification of the Common Stock referred to in Subsection 6(3)(a)); or any sale or conveyance to another entity (other than a Subsidiary) of all or substantially all of the assets of the Company (any such event referred to herein as a "Transaction"), then the Optional Conversion Rate and Mandatory Conversion Rate shall be adjusted so that after consummation of such a Transaction the holders of shares of Series B Mandatorily Convertible Single Reset Preferred Stock will receive, in lieu of the number of shares of Common Stock which such holder would have received upon conversion but for such Transaction, the kind and amount of securities, cash and other property receivable upon consummation of such Transaction by a holder of such number of shares of Common Stock, subject to further adjustment as provided in this Section 6, including without limitation, an adjustment to the Optional Conversion Rate on the Rate Reset Date if such Transaction occurs prior to the Rate Reset Date. On and after the consummation of any such Transaction, the Mandatory Conversion Date Market Price, which shall be used for purposes of

the determination as to which of clauses (a), (b) or (c) of the definition of Mandatory Conversion Rate applies, shall mean the sum of (i) the product of the Average Trading Price of any Publicly Traded Security received upon consummation of such Transaction for the 20 consecutive Trading Days immediately prior to, but not including, the Mandatory Conversion Date multiplied by the fraction of such security received in such Transaction per share of Common Stock (assuming the issuance of fractional shares) plus (ii) the fair market value of the cash and other property received upon consummation of such Transaction per share of Common Stock as of the day preceding the Mandatory Conversion Date as determined in accordance with Subsection 6(4). In determining the kind and amount of securities, cash or other property receivable upon consummation of such Transaction by a holder of shares of Common Stock, it shall be assumed that such holder is not a person or entity with which the Company consolidated or into which the Company was merged or which merged into the Company, as the case may be, or an affiliate of any such Person and that such holder of Common Stock failed to exercise rights of election, if any, as to the kind or amount of securities, cash, or other property receivable upon consummation of such transaction (provided that, if the kind or amount of securities, cash, or other property receivable upon consummation of such Transaction is not the same for each non-electing share, then the kind and amount of securities, cash, or other property receivable upon consummation of such transaction for each non-electing share shall be deemed to be the kind and amount so receivable per share by a plurality of the non-electing shares). In the event of such a reclassification, consolidation, merger, sale or conveyance, effective provisions shall be made in the certificate of incorporation or similar document of the resulting or surviving Company or entity so that the conversion rate applicable to any securities or property into which the shares of the Series B Mandatorily Convertible Single Reset Preferred Stock shall then be convertible shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Common Stock contained in Subsections 6(3)(a), 6(3)(b) and 6(3)(c) inclusive, and the other provisions of this Section 6 with respect to the Common Stock shall apply on terms as nearly equivalent as practicable to any such other securities and property deliverable upon conversion of shares of Series B Mandatorily Convertible Single Reset Preferred Stock.

(6) Whenever any adjustments are required in the shares of Common Stock into which each share of Series B Mandatorily Convertible Single Reset Preferred Stock is convertible, the Company shall forthwith (a) compute the adjusted Mandatory Conversion Rate and Optional Conversion Rate in accordance herewith and prepare a certificate signed by an officer of the Company setting forth the adjusted Mandatory Conversion Rate and the Optional Conversion Rate, describing in reasonable detail the method of calculation used and the facts

requiring such adjustment and upon which such adjustment is based, which certificate shall be conclusive, final and binding evidence of the correctness of the adjustment and file with the transfer agent of the Series B Mandatorily Convertible Single Reset Preferred Stock such certificate and (b) cause a copy of such certificate to be mailed to each holder of record of the Series B Mandatorily Convertible Single Reset Preferred Stock as of or promptly after the effective date of such adjustment and, with respect to adjustments applicable after the Rate Reset Date, make a prompt public announcement of such adjustment.

(7) The Company shall at all times reserve and keep available, free from preemptive rights out of its authorized but unissued shares of Common Stock for the purpose of issuance upon conversion of the Series B Mandatorily Convertible Single Reset Preferred Stock a number of shares of Common Stock equal to the product of (i) the number of shares of Common Stock then deliverable at such time upon an Optional Conversion of all shares of the Series B Mandatorily Convertible Single Reset Preferred Stock multiplied by (ii) 1.10.

(8) The Company will pay any and all documentary stamp or similar issue or transfer taxes that may be payable in respect of the issuance or delivery of shares of Common Stock on conversion of shares of the Series B Mandatorily Convertible Single Reset Preferred Stock pursuant to this Section 6. The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involving the issue and delivery of shares of Common Stock in the name other than in that which the shares of Series B Mandatorily Convertible Single Reset Preferred Stock so converted were registered and no such issue and delivery shall be made unless and until the person requesting such issue has paid to the Company the amount of any such tax, or has established to the satisfaction of the Company, that such tax has been paid.

(9) For the purpose of this Section 6, the term "Common Stock" shall include any shares of the Company of any class or series which has no preference or priority in the payment of dividends or in the distribution of assets upon any voluntary or involuntary liquidation, dissolution or winding up of the Company and which is not subject to redemption by the Company. However, Common Stock issuable upon conversion of the Series B Mandatorily Convertible Single Reset Preferred Stock shall include only shares of the class designated as Common Stock as of the original date of issuance of the Series B Mandatorily Convertible Single Reset Preferred Stock, or shares of the Company of any classes or series resulting from any reclassification or reclassifications thereof (including reclassifications referred to in clause (iv) of Subsection 6(3)(a)) and which have no preference or priority in the payment of dividends or in the distribution of assets upon any voluntary or involuntary liquidation, dissolution or winding up of the Company and which are not subject to redemption by the Company, provided

that, if at any time, there shall be more than one such resulting class or series, the shares of such class and series then so issuable shall be in the same proportion, if possible, or if not possible, in substantially the same proportion which the total number of shares of such class and series resulting from all such reclassifications bears to the total number of shares of all classes and series resulting from all such reclassifications.

(10) No fractional shares or scrip representing fractional shares shall be issued upon the conversion of the Series B Mandatorily Convertible Single Reset Preferred Stock. If any such conversion would otherwise require the issuance of a fractional share, an amount equal to such fraction multiplied by the current market price per share of Common Stock (determined as provided in Subsection 6(4)) of the Common Stock on the date of conversion shall be paid to the holder in cash by the Company. If on such date there is no current market price per share of Common Stock, the fair market value of a share of Common Stock (determined as provided in Subsection 6(4)) on such date, shall be used. If more than one share of Series B Mandatorily Convertible Single Reset Preferred Stock shall be surrendered for conversion at one time or for the same holder, the number of full shares of Common Stock issuable upon conversion thereof shall be computed on the basis of the aggregate number of shares of Series B Mandatorily Convertible Single Reset Preferred Stock so surrendered.

(11) All shares of the Series B Mandatorily Convertible Single Reset Preferred Stock purchased or otherwise acquired by the Company (including shares surrendered for conversion) shall be canceled and thereupon restored to the status of authorized but unissued shares of Preferred Stock undesignated as to series.

(12) No adjustment in the Mandatory Conversion Rate and the Optional Conversion Rate shall be required unless such adjustment (plus any adjustments not previously made by reason of this Subsection 6(12)) would require an increase or decrease of at least 1% in the number of shares of Common Stock into which each share of the Series B Mandatorily Convertible Single Reset Preferred Stock is then convertible; provided, however, that any adjustments which by reason of this Subsection 6(12) are not required to be made shall be carried forward and taken into account in any subsequent adjustment and provided further that any adjustment shall be required and made in accordance with the provisions of Subsection 6(3) not later than such time as may be required in order to preserve the tax free nature of a distribution to the holders of shares of Common Stock. If any action or transaction would require adjustment to the Mandatory Conversion Rate or the Optional Conversion Rate pursuant to this Section 6, only one adjustment shall be made and such adjustment shall be the amount of the adjustment that has the highest absolute value. All calculations under this Section 6 shall be made to the nearest one-hundredth of a share of Common Stock.

(13) The Board of Directors may make such upward adjustments in the Mandatory Conversion Rate and the Optional Conversion Rate, in addition to those required by this Section 6, as shall be determined by the Board of Directors, as evidenced by a resolution of the Board of Directors, to be advisable in order that any stock dividends, subdivisions of shares, distribution of rights to purchase stock or securities, or distribution of securities convertible into or exchangeable for stock (or any transaction that could be treated as any of the foregoing transactions pursuant to Section 305 of the Internal Revenue Code of 1986, as amended) made by the Company to its stockholders after the Rate Reset Date shall not be taxable. The determination of the Board of Directors as to whether an adjustment should be made pursuant to the provisions of this Subsection 6(13), and if so, as to what adjustment should be made and when, shall be conclusive, final and binding on the Company and all stockholders of the Company.

(14) In any case in which Section 6 shall require that an adjustment as a result of any event become effective at the opening of business on the Business Day next following a record date and the date fixed for conversion occurs after such record date, but before the occurrence of such event, the Company may, in its sole discretion, elect to defer (A) issuing to the holder of any converted Series B Mandatorily Convertible Single Reset Preferred Stock the additional shares of Common Stock issuable upon such conversion over the shares of Common Stock issuable before giving effect to such adjustments and (B) paying to such holder any amount in cash in lieu of a fractional share of Common Stock pursuant to Subsection 6(10), in each case until after the occurrence of such event.

(15) Notwithstanding the foregoing provisions of this Section 6, no adjustment of the Optional Conversion Rate or the Mandatory Conversion Rate shall be required to be made upon the issuance of any shares of Common Stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on securities of the Company and the investment of additional optional amounts in shares of Common Stock under any such plan or upon the issuance of shares of Common Stock (or securities, rights, warrants, options or similar rights, which are convertible or exercisable for shares of Common Stock) pursuant to any compensatory plan of the Company.

(16) Notwithstanding any other provision of this Section 6, the issuance or distribution of Rights shall not be deemed to constitute an issuance or a distribution or dividend of rights, warrants, or other securities to which any of the adjustment provisions described above applies until the occurrence of the earliest Rights Event.

(17) For purposes of this Section 6, shares of Common Stock owned by, or held for the account of, the Company, a Subsidiary or another entity of which a majority of the common stock or common equity interests are owned, directly or indirectly, by the Company shall be deemed to be not outstanding.

Section 7. Voting Rights. The holders of Series B Mandatorily Convertible Single Reset Preferred Stock shall have no right to vote except as otherwise specifically provided herein, in the Company's Restated Certificate of Incorporation or as required by statute.

(1) So long as any shares of Series B Mandatorily Convertible Single Reset Preferred Stock are outstanding, in addition to any other vote or consent of shareholders required in the Company's Restated Certificate of Incorporation by law, the affirmative vote of the holders of at least a majority of the Series B Mandatorily Convertible Single Reset Preferred Stock, given in person or by proxy, either pursuant to a consent in writing without a meeting (if permitted by law) and the Company's Restated Certificate of Incorporation or by vote at any meeting called for the purpose, shall be necessary for effecting or validating:

(a) any amendment, alteration or repeal of any of the provisions of the Company's Restated Certificate of Incorporation which affects adversely the powers, rights or preferences of the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock or reduces the minimum time required for any notice to which holders of Series B Mandatorily Convertible Single Reset Preferred Stock then outstanding may be entitled; provided, that the amendment of the provisions of the Company's Restated Certificate of Incorporation so as to authorize or create, or to increase the authorized amount of any junior stock or parity stock (including additional shares of Series B Mandatorily Convertible Single Reset Preferred Stock) shall not be deemed to affect adversely the powers, rights or preferences of the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock and shall not be subject to approval by the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock and such holders shall not be entitled to vote thereon to the fullest extent permitted by law.

(b) the authorization, creation or issuance of, or the increase in the authorized amount of, any stock of any class or series, or any security convertible into stock of any class or series, ranking senior to the Series B Mandatorily Convertible Single Reset Preferred Stock; or

(c) the merger or consolidation of the Company with or into any other corporation or other entity, unless in connection with such merger or consolidation each holder of shares of Series B Mandatorily Convertible Single Reset Preferred Stock immediately preceding such merger or consolidation shall

either (I) with respect to a merger or consolidation consummated prior to, on or after the Rate Reset Date, receive or continue to hold in the surviving or resulting corporation or other entity the same number of shares, with substantially the same rights and preferences (except as contemplated by Subsection 6(5) and except for those rights and preferences that could be affected without the vote of the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock, such as the authorization and issuance of parity stock or junior stock), as correspond to the shares of Series B Mandatorily Convertible Single Reset Preferred Stock held immediately prior to such merger or consolidation or (II) with respect to a merger or consolidation consummated after the Rate Reset Date, receive the kind and amount of securities, cash and other property that would have been receivable upon consummation of such merger or consolidation by such holder (subject to the assumptions set forth in Subsection 6(5)) if the Mandatory Conversion had occurred immediately prior to the consummation of such merger or consolidation and the Mandatory Conversion Rate was determined as of such time (and if clause (I) or (II) are applicable, then such merger or consolidation or shall not be subject to approval by the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock and such holders shall not be entitled to vote thereon).

(2) (a) In the event that full cumulative dividends on the Series B Mandatorily Convertible Single Reset Preferred Stock are not paid and are in arrears for six consecutive quarterly dividend periods following the Rate Reset Date, the number of directors of the Company constituting the entire Board of Directors shall be increased by two persons and the holders of shares of the Series B Mandatorily Convertible Single Reset Preferred Stock, voting separately as a class (together with the holders of shares of all other series of capital stock of the Company, including the Series A Junior Participating Preferred Stock, having the then present right to elect one or more directors as a result of a dividend arrearage but not then entitled to other separate voting rights to elect one or more directors in the event of such an arrearage (herein referred to as "Class Voting Stock")), shall have the right to elect such additional two directors to fill such positions at any regular meeting of shareholders or special meeting held in place thereof, or at a special meeting called as provided in Subsection 7(2)(c). Whenever all arrearages of dividends on the Series B Mandatorily Convertible Single Reset Preferred Stock then outstanding shall have been paid or declared and irrevocably set apart for payment, then the right of the holders of shares of the Series B Mandatorily Convertible Single Reset Preferred Stock to elect such additional two directors shall cease (but subject always to the same provisions for the vesting of such voting rights in the case of any similar future arrearages in dividends), and the terms of office of all persons previously elected as directors by the holders of shares of the Series B Mandatorily Convertible Single Reset Preferred Stock and such other Class Voting Stock shall forthwith terminate and the number of the Board of Directors shall be reduced accordingly.

(b) At any time after the voting power referred to in Subsection 7(2)(a) shall have been so vested in the holders of shares of the Series B Mandatorily Convertible Single Reset Preferred Stock, the Secretary of the Company may, and upon the written request of any holder or the holders of at least 10% of the number of shares of Series B Mandatorily Convertible Single Reset Preferred Stock then outstanding (addressed to the Secretary at the principal executive office of the Company) shall, call a special meeting of the holders of shares of the Series B Mandatorily Convertible Single Reset Preferred Stock and all other Class Voting Stock for the election of the directors to be elected by them pursuant to Subsection 7(2)(a); provided that the Secretary shall not be required to call such special meeting if the request for such meeting is received less than 45 calendar days before the date fixed for the next ensuing annual meeting of shareholders. Such call shall be made by notice similar to that provided in the bylaws of the Company for a special meeting of the shareholders or as required by law. Subject to the foregoing provisions, if any such special meeting required to be called as above provided shall not be called by the Secretary within 20 calendar days after receipt of an appropriate request, then any holder of shares of Series B Mandatorily Convertible Single Reset Preferred Stock may call such meeting, upon the notice above provided, and for that purpose shall have access to the stock books and records of the Company. Except as otherwise provided by law, at any such meeting, the holders of a majority of the number of shares of Series B Mandatorily Convertible Single Reset Preferred Stock and such other Class Voting Stock then outstanding shall constitute a quorum for the purpose of electing directors as contemplated in Subsection 7(2)(a). If at any such meeting or adjournment thereof, a quorum of such holders of Series B Mandatorily Convertible Single Reset Preferred Stock and, if applicable, such other Class Voting Stock shall not be present, no election of directors by the Series B Mandatorily Convertible Single Reset Preferred Stock and, if applicable, such other Class Voting Stock shall take place, and any such meeting may be adjourned from time to time for periods not exceeding 30 calendar days until a quorum of the Series B Mandatorily Convertible Single Reset Preferred Stock and, if applicable, the Class Voting Stock is present at such adjourned meeting. Unless otherwise provided by law or the Company's Restated Certificate of Incorporation, directors to be elected by the holders of shares of Series B Mandatorily Convertible Single Reset Preferred Stock and, if applicable, such other Class Voting Stock shall be elected by a plurality of the votes cast by such holders at a meeting at which a quorum is present. Notwithstanding the foregoing, the absence of a quorum of the Series B Mandatorily Convertible Single Reset Preferred Stock and, if applicable, such other Class Voting Stock shall not prevent the voting of, including the election of, directors by the holders of Common Stock and other classes of capital stock at such meeting.

(c) Any director who shall have been elected by holders of shares of Series B Mandatorily Convertible Single Reset Preferred Stock voting separately as a class, together, if applicable, with the holders of one or more other series of Class Voting Stock, or any director so elected as provided below, may be removed at any time during a class voting period, either for or without cause, by, and only by, the affirmative vote of the holders of a majority of the number of shares of Series B Mandatorily Convertible Single Reset Preferred Stock then outstanding, voting separately as a class, together, if applicable, with the holders of all other series of Class Voting Stock then outstanding, given at a special meeting of such shareholders called for such purpose, and any vacancy thereby created may be filled during such class voting period only by the holder of shares of Series B Mandatorily Convertible Single Reset Preferred Stock and, if applicable the other series, if any, of Class Voting Stock. In case any vacancy (other than as provided in the preceding sentence) shall occur among the directors elected by the holders of shares of the Series B Mandatorily Convertible Single Reset Preferred Stock (and, if applicable, such other Class Voting Stock), a successor shall be elected by the Board of Directors to serve until the next annual meeting of the shareholders or special meeting held in place thereof upon the nomination of the then remaining director elected by the holders of the Series B Mandatorily Convertible Single Reset Preferred Stock (and, if applicable, such other Class Voting Stock) or the successor of such remaining director.

(3) Holders of Series B Mandatorily Convertible Single Reset Preferred Stock shall not be entitled to receive notice of any meeting of shareholders at which they are not entitled to vote or consent except as otherwise provided by applicable law.

Section 8. Other Rights. Shares of Series B Mandatorily Convertible Single Reset Preferred Stock shall not have any relative, participating, optional or other special rights or powers other than as set forth herein, in the Company's Restated Certificate of Incorporation or as required by law.

Section 9. Notices. Subsequent to the Rate Reset Date, at any time while any shares of Series B Mandatorily Convertible Single Reset Preferred Stock are outstanding, (i) the Company shall declare a dividend (or any other distribution) on its Common Stock, excluding any cash dividends, (ii) the Company shall authorize the issuance to all holders of its Common Stock of rights or warrants to subscribe for or purchase shares of Common Stock or of securities exercisable for, convertible into, or exchangeable for, shares of Common Stock or (iii) the Company shall authorize any reclassification of its Common Stock (other than a subdivision or combination thereof) or any consolidation or merger to which the Company is a party and for which approval of any stockholders of the Company is required (except for a merger of the Company into one of its subsidiaries solely for the purpose of changing the corporate name or corporate domicile of the

Company to another state of the United States and in connection with which there is no substantive change in the rights or privileges of any securities of the Company other than changes resulting from differences in the corporate statutes of the then existing and the new state of domicile), or the sale or transfer to another corporation of the property of the Company as an entirety or substantially as an entirety, then the Company shall cause to be filed at each office or agency maintained for the purpose of conversion of the Series B Mandatorily Convertible Single Reset Preferred Stock, and shall cause to be mailed to the holders of Series B Mandatorily Convertible Single Reset Preferred Stock at their last addresses as they shall appear on the stock register, at least 10 days before the date hereinafter specified (or the earlier of the dates hereinafter specified, in the event that more than one date is specified), a notice stating (A) the date on which a record is to be taken for the purpose of such dividend, distribution, rights or warrants, or, if a record is not to be taken the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights or warrants are to be determined, or (B) the date on which any such reclassification, consolidation, merger, sale or transfer is expected to become effective, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their Common Stock for securities or other property (including cash), if any, deliverable upon such reclassification, consolidation, merger, sale or transfer. The failure to give or receive the notice required hereby or any defect therein shall not affect the legality or validity of such dividend, distribution, right or warrant or other action.

ARTICLE 5. BY-LAWS

The Board of Directors shall have the power to adopt, amend or repeal the By-laws of this corporation, subject to the power of the stockholders to amend or repeal such By-laws. The stockholders having voting power shall also have the power to adopt, amend or repeal the By-laws of this corporation.

ARTICLE 6. ELECTION OF DIRECTORS

Except as may be otherwise required by the By-laws, written ballots are not required in the election of Directors.

ARTICLE 7. PREEMPTIVE RIGHTS

Preemptive rights shall not exist with respect to shares of stock or securities convertible into shares of stock of this corporation.

ARTICLE 8. CUMULATIVE VOTING

The right to cumulate votes in the election of Directors shall not exist with respect to shares of stock of this corporation.

ARTICLE 9. AMENDMENTS TO RESTATED CERTIFICATE OF INCORPORATION

This corporation reserves the right to amend or repeal any of the provisions contained in this Restated Certificate of Incorporation in any manner now or hereafter permitted by law, and the rights of the stockholders of this corporation are granted subject to this reservation.

ARTICLE 10. LIMITATION OF DIRECTOR LIABILITY

To the full extent that the General Corporation Law of the State of Delaware, as it exists on the date hereof or may hereafter be amended, permits the limitation or elimination of the liability of Directors, a Director of this corporation shall not be liable to this corporation or its stockholders for monetary damages for breach of fiduciary duty as a Director. Any amendment to or repeal of this Article 10 shall not adversely affect any right or protection of a Director of this corporation for or with respect to any acts or omissions of such Director occurring prior to such amendment or repeal.

ARTICLE 11. ACTION BY STOCKHOLDERS WITHOUT A MEETING

Any action by the stockholders of this corporation shall be taken at a meeting of stockholders and no action may be taken by written consent of stockholders entitled to vote on such action.

ARTICLE 12. SPECIAL VOTING REQUIREMENTS

In addition to any affirmative vote required by law, by this Restated Certificate of Incorporation, by any agreement with any national securities exchange, or as may be otherwise required, any "Business Combination" (as hereinafter defined) involving this corporation shall be subject to approval in the manner set forth in this Article 12.

12.1 Definitions.

For the purposes of this Article 12:

(a) "Affiliate" and "beneficial owner" are used herein as defined in Rule 12b-2 and Rule 13d-3, respectively, under the Securities Exchange Act of 1934 as in effect on January 1, 1992 (the "1934 Act"). The term "Affiliate" as used herein shall exclude this corporation, but shall include the definition of "Associate" as contained in said Rule 12b-2.

(b) An "Interested Stockholder" is a person other than (i) the corporation or (ii) Burlington Resources Inc., a Delaware corporation ("BRI"), as long as BRI continues to own at least a majority of the stock of this corporation entitled to vote for the election of Directors ("Voting Stock") and there has been no Change in Control of BRI since January 1, 1992, who is (A) the beneficial owner of ten percent or more of the Voting Stock or (B) an Affiliate of this corporation which (1) at any time within a two-year period prior to the record date for the vote on a Business Combination was the beneficial owner of ten percent or more of the Voting Stock, or (2) at the completion of the Business Combination will be the beneficial owner of ten percent or more of the Voting Stock.

(c) A "Person" is a natural person or a legal entity of any kind, together with any Affiliate of such person or entity, or any person or entity with whom such person, entity or any Affiliate has any agreement or understanding relating to acquiring, voting or holding Voting Stock.

(d) A "Disinterested Director" is a member of the Board of Directors of this corporation (other than the Interested Stockholder) who was a Director prior to the time the Interested Stockholder became an Interested Stockholder, or any Director who was recommended for election by the Disinterested Directors. Any action to be taken by the Disinterested Directors shall require the affirmative vote of at least two-thirds of the Disinterested Directors.

(e) A "Business Combination" is (i) a merger or consolidation of this corporation or any of its subsidiaries with an Interested Stockholder; (ii) the sale, lease, exchange, pledge, transfer or other disposition (A) by this corporation or any of its subsidiaries of all or a Substantial Part of the corporation's Assets to an Interested Stockholder, or (B) by an Interested Stockholder of any of its assets, except in the ordinary course of business, to this corporation or any of its subsidiaries; (iii) the issuance of stock or other securities of this corporation or any of its subsidiaries to an Interested Stockholder, other than on a pro rata basis to all holders of Voting Stock of the same class held by the Interested Stockholder pursuant to a stock split, stock dividend or distribution of warrants or rights; (iv) the adoption of any plan or proposal for the liquidation or dissolution of this corporation proposed by or on behalf of an Interested Stockholder; (v) any reclassification of securities, recapitalization, merger or consolidation or other transaction which has the effect, directly or indirectly, of increasing the proportionate share of any Voting Stock beneficially owned by an Interested Stockholder; or (vi) any agreement, contract or other arrangement providing for any of the foregoing transactions.

(f) A "Substantial Part of the corporation's Assets" shall mean assets of

this corporation or any of its subsidiaries in an amount equal to twenty percent or more of the fair market value, as determined by the Disinterested Directors, of the total consolidated assets of this corporation and its subsidiaries taken as a whole as of the end of its most recent fiscal year ended prior to the time the determination is made.

(g) A "Change in Control" shall be deemed to occur (i) if any Person is or becomes the "beneficial owner" (as defined in Rule 13d-3 of the 1934 Act), directly or indirectly, of securities of BRI representing twenty percent or more of the stock of BRI entitled to vote for Directors of BRI, (ii) upon the first purchase of BRI's common stock pursuant to a tender or exchange offer (other than a tender or exchange offer made by BRI), (iii) upon the approval by BRI's stockholders of a merger or consolidation, a sale or disposition of all or substantially all of BRI's assets or a plan of liquidation or dissolution of BRI, or (iv) if, during any period of two consecutive years, individuals who at the beginning of such period constitute the BRI Board of Directors cease for any reason to constitute at least a majority thereof, unless the election or nomination of the election by BRI's stockholders of each new Director was approved by a vote of at least two-thirds of the Directors then still in office who were Directors at the beginning of the period.

12.2 Vote Required for Business Combinations.

The affirmative vote of not less than fifty-one percent of the Voting Stock, excluding the Voting Stock of an Interested Stockholder who is a party to the Business Combination, shall be required for the adoption or authorization of a Business Combination, unless the Disinterested Directors determine that:

(a) The Interested Stockholder is the beneficial owner of not less than eighty percent of the Voting Stock and has declared its intention to vote in favor of or to approve such Business Combination; or

(b) (i) The fair market value of the consideration per share to be received or retained by the holders of each class or series of stock of this corporation in a Business Combination is equal to or greater than the consideration per share (including brokerage commissions and soliciting dealer's fees) paid by such Interested Stockholder in acquiring the largest number of shares of such class of stock previously acquired in any one transaction or series of related transactions, whether before or after the Interested Stockholder became an Interested Stockholder and (ii) the Interested Stockholder shall not have received the benefit, directly or indirectly (except proportionately as a stockholder), of any loans, advances, guarantees, pledges or other financial assistance provided by this corporation, whether in anticipation of or in connection with such Business Combination or otherwise.

12.3 Information Requirements.


In the event any vote of holders of Voting Stock is required for the adoption or approval of any Business Combination, a proxy or information statement describing the Business Combination and complying with the requirements of the 1934 Act shall be mailed at a date determined by the Disinterested Directors to all stockholders of this corporation whether or not such statement is required under the 1934 Act. The statement shall contain any recommendations as to the advisability of the Business Combination which the Disinterested Directors, or any of them, may choose to state and, if deemed advisable by the Disinterested Directors, an opinion of an investment banking firm as to the fairness of the terms of such Business Combination. Such firm shall be selected by the Disinterested Directors and be paid a fee for its services by this corporation as approved by the Disinterested Directors.

12.4 Amendment.

No amendment to this Restated Certificate of Incorporation shall amend, alter, change or repeal any of the provisions of Article 11 or of this Article 12 unless such amendment shall receive the affirmative vote of not less than fifty-one percent of the Voting Stock, excluding the Voting Stock of any Interested Stockholder as defined in Section 12.1 of this Article 12.

IN WITNESS WHEREOF, this Restated Certificate of Incorporation has been
executed by El Paso Corporation this 7th day of February 2001.

El Paso Corporation

By: 
Margaret E. Roark
Assistant Secretary

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 24, 2012

EL PASO HOLDCO LLC

(successor in interest to El Paso Corporation)
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

1-14365
(Commission
File Number)

45-3953911
(I.R.S. Employer
Identification No.)

**El Paso Building
1001 Louisiana Street
Houston, Texas 77002**
(Address of principal executive offices, including zip code)

713-420-2600
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
-

Item 2.01. Completion of Acquisition or Disposition of Assets.

Effective on May 25, 2012, Kinder Morgan, Inc. ("KMI") completed the acquisition of El Paso Corporation, a Delaware corporation (f/k/a Sirius Holdings Merger Corporation) ("New El Paso"), pursuant to the Agreement and Plan of Merger dated October 16, 2011 (the "Merger Agreement"), by and among KMI, Sherpa Merger Sub, Inc., a Delaware corporation and wholly owned subsidiary of KMI, Sherpa Acquisition, LLC, a Delaware limited liability company and wholly owned subsidiary of KMI, New El Paso and El Paso LLC, a Delaware limited liability company and wholly owned subsidiary of New El Paso (f/k/a El Paso Corporation and successor in interest to Sirius Merger Corporation).

Pursuant to the Merger Agreement, Sherpa Merger Sub, Inc. was merged with and into New El Paso, with New El Paso surviving the merger as a wholly owned subsidiary of KMI (the "Merger"). Immediately following the Merger, New El Paso was merged with and into Sherpa Acquisition, LLC, with Sherpa Acquisition, LLC surviving the merger and being renamed El Paso Holdco LLC. Upon completion of these transactions, El Paso LLC became a direct, wholly owned subsidiary of El Paso Holdco LLC, which is a direct, wholly owned subsidiary of KMI.

Under the Merger Agreement, at the effective time of the Merger, each share of New El Paso common stock issued and outstanding immediately prior to the effective time of the Merger (other than shares of New El Paso common stock held directly or indirectly by KMI or New El Paso or any of their subsidiaries or dissenting shares in accordance with Delaware law) was converted into the right to receive, at the election of the holder but subject to proration, one of the following (the "Merger Consideration"): (i) 0.9635 of a share of Kinder Morgan Class P common stock and 0.640 of a warrant to purchase one share of Kinder Morgan Class P common stock (the "Cash Election"); (ii) \$25.91 in cash without interest and 0.640 of a warrant to purchase one share of Kinder Morgan Class P common stock; or (iii) 0.4187 of a share of Kinder Morgan Class P common stock, \$14.65 in cash without interest and 0.640 of a warrant to purchase one share of Kinder Morgan Class P common stock (the "Mixed Election"). Outstanding El Paso equity awards were converted into the right to receive, at the equity award holder's election but subject to proration, either the Cash Election or the Mixed Election.

The final results of the Merger Consideration election (taking into account New El Paso stockholders and equity awards holders) are as follows:

- Holders of approximately 76.4% of outstanding New El Paso shares, or 601,973,265 New El Paso shares, elected to receive the Stock Consideration;
- Holders of approximately 0.8% of outstanding New El Paso shares, or 6,238,673 New El Paso shares, elected to receive the Cash Consideration;
- Holders of approximately 7.9% of outstanding New El Paso shares, or 62,671,613 New El Paso shares, elected to receive the Mixed Consideration; and
- Holders of approximately 14.9% of outstanding New El Paso shares, or 117,552,254 New El Paso shares, made no election. These holders will receive the Mixed Consideration.

Because it was oversubscribed, the Stock Consideration underwent a proration adjustment, and holders of New El Paso shares electing the Stock Consideration will receive, on a rounded basis, 0.4231 of a share of Kinder Morgan Class P common stock, \$14.53 in cash without interest and 0.640 of a warrant to purchase one share of Kinder Morgan Class P common stock for each share of New El Paso common stock.

- 1 -

In connection with the Merger, KMI will issue approximately 330.2 million shares of Kinder Morgan Class P common stock and approximately 504.6 million warrants and will pay approximately \$11,550.6 million in cash to former New El Paso stockholders and New El Paso equity award holders.

The foregoing description of the Merger and the Merger Agreement does not purport to be complete and is qualified in its entirety by reference to the Merger Agreement, a copy of which is attached as Exhibit 2.1 to the Current Report on Form 8-K filed with the Securities and Exchange Commission by El Paso Corporation on October 18, 2011 and incorporated herein by reference.

Item 3.01. Notice of Delisting or Failure to Satisfy a Continued Listing Rule or Standard; Transfer of Listing.

In connection with the consummation of the Merger, the New York Stock Exchange (the "Exchange") was notified that each outstanding share of New El Paso common stock was converted pursuant to the Merger into the right to receive the Merger Consideration, subject to the terms and conditions of the Merger Agreement. New El Paso requested that the Exchange file a notification of removal from listing on Form 25 with the SEC with respect to the delisting of the shares of New El Paso common stock. New El Paso common stock was delisted and removed from trading on the Exchange on May 25, 2012.

In addition, KMI intends to file with the SEC a certification and notice of termination on Form 15 requesting that New El Paso common stock be deregistered under Section 12(g) of the Exchange Act of 1934, as amended (the "Exchange Act"), and that New El Paso's reporting obligations under Sections 13 and 15(d) of the Exchange Act with respect to its common stock be suspended.

Item 3.03. Material Modification to Rights of Security Holders.

Pursuant to the terms of the Merger Agreement, each share of New El Paso common stock issued and outstanding immediately prior to the effective time of the Merger (other than shares of New El Paso common stock held directly or indirectly by KMI or New El Paso or any of their subsidiaries or dissenting shares in accordance with Delaware law) was converted into the right to receive the Merger Consideration.

At the effective time of the Merger, holders of shares of New El Paso common stock ceased to have any rights as stockholders of New El Paso, other than the right to receive the Merger Consideration in accordance with the Merger Agreement or, in the case of shares of New El Paso common stock held by stockholders properly exercising appraisal rights available under Section 262 of the Delaware General Corporation Law, appraisal rights.

-2-

At the effective time of the Merger, each outstanding stock option, restricted share and performance-based restricted stock unit was converted into the right to receive, at the election of the holder (which election applied to all, but not less than all, of such holder's outstanding equity awards), but subject to proration with respect to the cash portion, either cash or a mixture of cash and shares of KMI common stock for all shares subject to such awards (in the case of stock options, less the aggregate exercise price). Such holders also received the warrants as part of the Merger Consideration. Holders of such stock options, restricted shares and performance-based restricted stock units (and common stock purchased in respect of options, if any, outstanding under the El Paso ESPP as of immediately prior to closing) were not able to make a stock election. In the case of performance-based restricted stock units, performance was deemed to be attained at target.

The information in Item 2.01 is incorporated herein by reference.

Item 4.01 Changes in Registrant's Certifying Accountant.

In connection with the Merger, KMI, as sole member of El Paso Holdco LLC, approved the engagement of PricewaterhouseCoopers LLP ("PwC") to audit the consolidated financial statements of El Paso Holdco LLC for the year ending December 31, 2012 in replacement of Ernst & Young LLP ("E&Y"), which was dismissed as El Paso Holdco LLC's independent auditor, effective as of May 25, 2012. Because El Paso Holdco LLC's financial statements will be consolidated with those of KMI following the Merger, PwC, which is the independent auditor of KMI and its subsidiaries, was chosen to be El Paso Holdco LLC's independent auditor as well.

The reports of E&Y on the consolidated financial statements of El Paso Corporation, the predecessor of El Paso Holdco LLC, for the years ended December 31, 2011 and 2010 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles.

In connection with the audit of El Paso Corporation's consolidated financial statements for the years ended December 31, 2011 and 2010, and during the subsequent interim period through May 25, 2012, there were no disagreements between El Paso Corporation and E&Y on any matters of accounting principles or practices, financial statement disclosure or auditing scope and procedures which, if not resolved to the satisfaction of E&Y, would have caused E&Y to make reference to the matter in its reports.

There were no reportable events (as defined in Regulation S-K Item 304(a)(1)(v)) during the years ended December 31, 2011 and 2010 and the subsequent interim period through May 25, 2012.

El Paso Corporation has not consulted with PwC during the years ended December 31, 2011 and 2010 or any subsequent interim period through May 25, 2012 on either the application of accounting principles or the type of opinion PwC might issue on El Paso Corporation's financial statements.

In accordance with the rules of the Securities and Exchange Commission, El Paso Holdco LLC provided E&Y a copy of the disclosures made under this Item 4.01 and requested E&Y to furnish it with a letter addressed to the Securities and Exchange Commission stating whether or not E&Y agrees with the above statements. Such letter is attached as Exhibit 16.1.

Item 5.01. Changes in Control of Registrant.

As a result of the Merger, a change of control of New El Paso occurred on May 25, 2012, and New El Paso became an indirect, wholly owned subsidiary of KMI.

KMI's sources of funds for the Merger include KMI common stock and warrants and cash. In order to (i) fund the cash consideration for the transactions of approximately \$11.5 billion, (ii) repay or redeem certain indebtedness of El Paso outstanding on the closing date of the Merger and (iii) pay fees and expenses in connection with the Merger and related transactions and the Debt Financing of approximately \$300 million, KMI entered into the following agreements (together, the "Debt Financing"): (x) an amendment to Kinder Morgan Kansas, Inc.'s ("KMK") \$1.0 billion revolving credit facility, dated May 30, 2007, to provide, among other things, for KMK to merge directly or indirectly with KMI, with KMI succeeding KMK as borrower under such facility, (y) an incremental joinder agreement which provides for \$750 million in additional commitments under such credit facility effective upon such facility's amendment and restatement, and (z) an acquisition debt facilities credit agreement containing a \$6.8 billion 364-day facility and a \$5.0 billion 3-year term loan facility.

The foregoing description of the Debt Financing does not purport to be complete and is qualified in its entirety by reference to KMI's Current Report on Form 8-K filed with the Securities and Exchange Commission by El Paso Corporation on February 16, 2012 and to the agreements attached as Exhibits 10.72, 10.73 and 10.74 to KMI's Post-Effective Amendment No. 1 to Form S-4 filed with the Securities and Exchange Commission on February 27, 2012 and incorporated herein by reference.

-3-

The information in Items 2.01 and 5.02 is incorporated herein by reference.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

At the effective time of the Merger, each of the members of the New El Paso board of directors resigned from the board and ceased to be directors of New El Paso. The members of the New El Paso board immediately prior to the effective time of the Merger were Messrs. Juan Carlos Braniff, David W. Crane, Douglas L. Foshee, Robert W. Goldman, Anthony W. Hall, Jr., Thomas R. Hix, Ferrell P. McClean, Timothy J. Probert, Steven J. Shapiro, J. Michael Talbert, Robert F. Vagt and John L. Whitmire. Following the merger of New El Paso with and into El Paso Holdco LLC, as described in Item 2.01, KMI, as sole member, manages the surviving entity.

At the effective time of the Merger, the following officers of New El Paso resigned from their positions: Douglas L. Foshee, Chairman, President and Chief Executive Officer; John R. Sult, Executive Vice President and Chief Financial Officer; James C. Yardley, Executive Vice President and President Pipeline Group; D. Mark Leland, Executive Vice President and President of Midstream; Robert W. Baker, Executive Vice President and General Counsel; James J. Cleary, President of Western Pipeline Group; Susan B. Ortenstone, Executive Vice President and Chief Administrative Officer; and Dane E. Whitehead, Senior Vice President of Strategy and Enterprise Business Development.

As of the effective time of the Merger, Messrs. Hall and Vagt were elected to the board of directors of KMI. Mr. Hall and Mr. Vagt were selected as directors pursuant to the terms of the Merger Agreement which provides that KMI will take all action necessary, including increasing the size of the its board and amending its shareholders agreement to effect such increase, to elect two individuals designated by New El Paso to the KMI board of directors.

Item 5.03. Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

Following the effective time of the merger of New El Paso with and into El Paso Holdco LLC, as contemplated by the Merger Agreement, the certificate of formation and limited liability company agreement of El Paso Holdco LLC became the certificate of formation and limited liability company agreement of the surviving entity. The certificate of formation and limited liability company agreement of El Paso Holdco LLC are attached hereto as Exhibits 3.1 and 3.2, respectively, and are incorporated herein by reference.

Item 8.01. Other Events.

On May 24 2012, KMI issued a press release announcing the completion of the Merger. A copy of the press release is attached as Exhibit 99.1 to this report and is incorporated herein by reference.

Item 9.01. Financial Statements and Exhibits.

(d) *Exhibits.*

<u>Exhibit Number</u>	<u>Description</u>
2.1	Agreement and Plan of Merger, dated as of October 16, 2011, by and among El Paso Corporation, Sirius Holdings Merger Corporation, Sirius Merger Corporation, Kinder Morgan, Inc., Sherpa Merger Sub, Inc. and Sherpa Acquisition, LLC (filed as Exhibit 2.1 to El Paso Corporation's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 18, 2011 and incorporated herein by reference).

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- 3.1 Certificate of Formation of El Paso Holdco LLC, as amended.
 - 3.2 Amended and Restated Limited Liability Company Agreement of El Paso Holdco LLC.
 - 16.1 Letter of E&Y regarding change in certifying accountant.
 - 99.1 Press Release dated May 24, 2012.

-5-

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

EL PASO HOLDCO LLC
(successor in interest to El Paso Corporation)

Dated: May 30, 2012

By: /s/ Joseph Listengart
Joseph Listengart
Vice President

EXHIBIT INDEX

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 24, 2012

KINDER MORGAN, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation)

1-35081
(Commission
File Number)

80-0682103
(I.R.S. Employer
Identification No.)

**500 Dallas Street, Suite 1000
Houston, Texas 77002**
(Address of principal executive offices, including zip code)

713-369-9000
(Registrant's telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
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Pursuant to the Merger Agreement, Sherpa Merger Sub, Inc. was merged with and into New El Paso, with New El Paso surviving the merger as a wholly owned subsidiary of KMI (the "Merger"). Immediately following the Merger, New El Paso was merged with and into Sherpa Acquisition, LLC, with Sherpa Acquisition, LLC surviving the merger and being renamed El Paso Holdco LLC. Upon completion of these transactions, El Paso LLC became a direct, wholly owned subsidiary of El Paso Holdco LLC, which is a direct, wholly owned subsidiary of KMI.

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The final results of the Merger Consideration election (taking into account New El Paso stockholders and equity award holders) are as follows:

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- Holders of approximately 0.8% of outstanding New El Paso shares, or 6,238,673 New El Paso shares, elected to receive the Cash Consideration;
- Holders of approximately 7.9% of outstanding New El Paso shares, or 62,671,613 New El Paso shares, elected to receive the Mixed Consideration; and
- Holders of approximately 14.9% of outstanding New El Paso shares, or 117,552,254 New El Paso shares, made no election. These holders will receive the Mixed Consideration.

Because it was oversubscribed, the Stock Consideration underwent a proration adjustment, and holders of New El Paso shares electing the Stock Consideration will receive, on a rounded basis, 0.4231 of a share of Kinder Morgan Class P common stock, \$14.53 in cash without interest and 0.640 of a warrant to purchase one share of Kinder Morgan Class P common stock for each share of New El Paso common stock.

- 1 -

In connection with the Merger, KMI will issue approximately 330.2 million shares of Kinder Morgan Class P common stock and approximately 504.6 million warrants and will pay approximately \$11,550.6 million in cash to former New El Paso stockholders and New El Paso equity award holders. The warrants are being issued pursuant to a Warrant Agreement, dated as of May 25, 2012 (the "Warrant Agreement"), among KMI, Computershare Trust Company, N.A. and Computershare Inc., as Warrant Agent.

The foregoing description of the Merger, the Merger Agreement and the Warrant Agreement does not purport to be complete and is qualified in its entirety by reference to (i) the Merger Agreement, a copy of which is attached as Exhibit 2.1 to KMI's Current Report on Form 8-K filed with the Securities and Exchange Commission on October 19, 2011, and (ii) the Warrant Agreement, a copy of which is attached to this report as Exhibit 4.1, both of which are incorporated herein by reference.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

Effective on May 25, 2012, the board of directors of KMI elected Anthony W. Hall, Jr. and Robert F. Vagt, both of whom are former members of the board of directors of New El Paso, to KMI's board, effective as of the effective time of the Merger. Following the elections of Messrs. Hall and Vagt, KMI has fifteen members on its board of directors. Mr. Vagt has been appointed to the audit committee of KMI's board. Mr. Hall has been appointed to the nominating and governance committee of KMI's board. Mr. Hall and Mr. Vagt were selected as directors pursuant to the terms of the Merger Agreement which provides that KMI will take all action necessary, including increasing the size of the its board and amending its shareholders agreement to effect such increase, to elect two individuals designated by New El Paso to the KMI board of directors. Each of Mr. Hall and Mr. Vagt will receive compensation for his service on the board in accordance with KMI's standard compensatory arrangement for non-employee directors. A description of the compensatory arrangement for non-employee directors is set forth in KMI's Annual Report on Form 10-K for the year ended December 31, 2011.

Mr. Hall served as a director of El Paso Corporation since 2001. Mr. Hall has been engaged in the private practice of law since February 2010. He previously served as Chief Administrative Officer of the City of Houston from January 2004 to February 2010. Mr. Hall served as the City Attorney for the City of Houston from March 1998 to January 2004. Prior to March 1998, Mr. Hall was a partner in the Houston law firm of Jackson Walker, LLP. Mr. Hall is Chairman of the Houston Endowment Inc. and Chairman of the Boulé Foundation.

Mr. Vagt served as a director of El Paso Corporation since 2005. Mr. Vagt has served as President of The Heinz Endowments since January 2008. Prior to that time, he served as President of Davidson College from July 1997 to August 2007. Mr. Vagt served as President and Chief Operating Officer of Seagull Energy Corporation from 1996 to 1997. From 1992 to 1996, he served as President, Chairman and Chief Executive Officer of Global Natural Resources. Mr.

Vagt served as President and Chief Operating Officer of Adobe Resources Corporation from 1989 to 1992. Prior to 1989, he served in various positions with Adobe Resources Corporation and its predecessor entities. Mr. Vagt serves as the non-executive chairman of Solergy Power Ltd, a private, London-based entity.

Item 5.03 Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.

In connection with the Merger, KMI's Bylaws were amended and restated as of the effective time of the Merger to (i) increase the size of KMI's board of directors from thirteen to fifteen directors, (ii) amend the definition of Supermajority Board Vote to refer to ten directors instead of eight, and (iii) except from the requirement that specified matters be brought before the KMI board and approved by a Supermajority Board Vote, El Paso Pipeline Partners, L.P., a master limited partnership formed in Delaware ("EPB"), and its general partner, El Paso Pipeline GP Company, L.L.C., a Delaware limited liability company which was acquired by KMI in the Merger ("EPGP"). KMI's original Bylaws provided this exception for Kinder Morgan Energy Partners, L.P., a master limited partnership formed in Delaware ("KMP"), its general partner, Kinder Morgan G.P., Inc., a Delaware corporation (the "General Partner"), Kinder Morgan Management, L.L.C, a Delaware limited liability company and the delegate of the General Partner ("KMR"), KMP's operating subsidiaries and any of their respective Subsidiaries (as defined in the amended and restated Bylaws). Therefore, this amendment is intended to ensure similar treatment of EPB and EPGP.

The above summary of the revisions to KMI's Bylaws is qualified in its entirety by reference to the Amended and Restated Bylaws, a copy of which is attached to this report as Exhibit 3.1 and incorporated herein by reference.

Item 8.01 Other Events.

Amendment to Shareholders Agreement

In connection with the Merger, KMI and certain holders of its common stock amended KMI's Shareholders Agreement, effective as of the effective time of the Merger, to (i) increase the size of KMI's board of directors from thirteen to fifteen directors, (ii) except EPGP from the requirement that directors nominated by the Investor Shareholders (as defined in the Shareholders Agreement) be permitted to be appointed, upon request, to the boards of Subsidiaries (as defined in the Shareholders Agreement) of KMI, (iii) permit such nominees of the Investor Shareholders to attend meetings of the board of EPGP and (iv) except EPB and EPGP in the same manner as KMP and KMGP from the prohibition on taking action that would impose any filing obligation, restriction or regulatory burden on any Eligible Investor Shareholder or its Affiliates (both as defined in the Shareholders Agreement) without approval by such shareholder.

The above summary of the revisions to KMI's Shareholders Agreement is qualified in its entirety by reference to Amendment No. 1 to Shareholders Agreement, a copy of which is attached to this report as Exhibit 4.3 and incorporated herein by reference.

Press Release

On May 24 2012, KMI issued a press release announcing the completion of the Merger. A copy of the press release is attached as Exhibit 99.1 to this report and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits

(a) Financial Statements of Businesses Acquired.

The audited financial statements of El Paso Corporation, predecessor to New El Paso, required by Item 9.01(a) of Form 8-K are incorporated herein by reference to El Paso Corporation's Annual Report on Form 10-K for the year ended December 31, 2011, and the unaudited financial statements of El Paso Corporation required by Item 9.01(a) of Form 8-K are incorporated herein by reference to El Paso Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012.

(b) Pro Forma Financial Information.

Unaudited pro forma condensed combined financial statements and notes related thereto, relating to the completion of the Merger, as of and for the three months ended March 31, 2012 and for the year ended December 31, 2011 will be filed as part of an amendment to this report not later than 71 calendar days after the date this report is required to be filed.

(d) Exhibits.

- 2.1 Agreement and Plan of Merger, dated as of October 16, 2011, by and among El Paso Corporation, Sirius Holdings Merger Corporation, Sirius Merger Corporation, Kinder Morgan, Inc., Sherpa Merger Sub, Inc. and Sherpa Acquisition, LLC (filed as Exhibit 2.1 to Kinder Morgan, Inc.'s Current Report on Form 8-K filed with the Securities and Exchange Commission on October 19, 2011 and incorporated herein by reference).
- 3.1 Amended and Restated Bylaws of Kinder Morgan, Inc.
- 4.1 Warrant Agreement, dated as of May 25, 2012, among Kinder Morgan, Inc., Computershare Trust Company, N.A. and Computershare Inc., as Warrant Agent.
- 4.2 Form of Warrant Certificate (included as Exhibit A to the Warrant Agreement filed as Exhibit 4.1).
- 4.3 Amendment No. 1 to Shareholders Agreement among Kinder Morgan, Inc. and certain holders of common stock.
- 23.1 Consent of Ernst & Young LLP.
- 23.2 Consent of PricewaterhouseCoopers LLP.
- 99.1 Press release dated May 24, 2012.
- 99.2 Audited financial statements of El Paso Corporation, predecessor to New El Paso, incorporated herein by reference to El Paso Corporation's Annual Report on Form 10-K for the year ended December 31, 2011.
- 99.3 Unaudited financial statements of El Paso Corporation incorporated herein by reference to El Paso Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012.

- 4 -

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

KINDER MORGAN, INC.

Dated: May 30, 2012

By: /s/ Kimberly A. Dang

Kimberly A. Dang

Vice President and Chief Financial Officer

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>
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99.3	Unaudited financial statements of El Paso Corporation incorporated herein by reference to El Paso Corporation's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012.

EPEC OIL COMPANY LIQUIDATING TRUST AGREEMENT

This EPEC Oil Company Liquidating Trust Agreement (the "Trust Agreement"), dated as of March 9, 2001, is among EPEC Oil Company (the "Company"), as Trustor and El Paso Energy E.S.T. Company, a Delaware corporation, as Trustee (such person and its successors appointed pursuant hereto, the "Trustee").

WHEREAS, the Company was dissolved on December 18, 1998 (the "Dissolution Date") upon the filing of a certificate of dissolution pursuant Section 275 of the Delaware General Corporation Law (the "DGCL") with the Secretary of State of the State of Delaware;

WHEREAS, the Company, by action of its board of directors, adopted a Plan of Distribution, effective as of December 18, 1998, in furtherance of its obligations under Section 281 of the DGCL, which Plan was amended and restated as of March 9, 2001 (the "Plan");

WHEREAS, in accordance with the Plan, the purpose of the trust established under this Trust Agreement is to make provision in satisfaction of the requirements of Section 281 of the DGCL and, in connection therewith, to preserve and administer the rights and assets of the Company and the Trust, to provide for the payment and satisfaction of Plan Obligations (as herein defined), and to make liquidating distributions, if any, to the primary beneficiary of the Trust;

WHEREAS, the Company desires to have the Trustee take title to and hold in trust, upon the terms and subject to the uses and purposes hereinafter set forth, all of the Company's property as of the Trust Effective Date (as hereinafter defined), other than an intercompany receivable from New Midwestern, Inc. in the amount of approximately \$93 million (the "NMI Receivable"), which has been distributed to the sole stockholder of the Company in accordance with the Plan.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, as well as other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby declared as follows:

ARTICLE I

DEFINITIONS

All capitalized terms used herein and not otherwise defined shall have the meanings set forth in this Article I.

1.1 "Affiliate" means, with respect to any Person, any other Person directly or indirectly Controlling or Controlled by or under direct or indirect common Control with such Person.

1.2 "Claims Assertion Date" means December 18, 2008.

1.3 "Code" means the Internal Revenue Code of 1986, as amended.

1.4 "Company" means EPEC Oil Company, a dissolved Delaware corporation

1.5 "Contingent or Conditional Contract Claim" means any claim against the Company, asserted prior to the expiration of the Claims Assertion Date, for any obligation

under the terms of any contract or agreement entered into between the Company and any other Person or Persons prior to the Effective Date, which contractual obligation, as of the Effective Date, was contingent upon the occurrence or nonoccurrence of future events or was otherwise conditional or unperfected.

1.6 "Control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through ownership of voting securities, by contract or otherwise. "Controlling" and "Controlled" shall have correlative meanings. Without limiting the generality of the foregoing, a Person shall be deemed to Control any other Person in which it owns, directly or indirectly, a majority of the stock or other ownership interests.

1.7 "Dissolution Date" shall have the meaning set forth in the recitals hereof

1.8 "Effective Date" means March 9, 2001.

1.9 "Final Liquidating Distribution" shall mean the liquidating distribution, if any, to the Primary Beneficiary made in accordance with Section 8.2 hereof

1.10 "Final Judgment" means (i) a judgment, order, or other decree issued by any state or federal court or government agency of competent jurisdiction located in one of the states, territories, or possessions of the United States or in the District of Columbia or by any foreign court of competent jurisdiction, which judgment, order, or other decree has not been reversed or stayed and as to which the time for appeal has expired and as to which no appeal or petition for review, rehearing, or certiorari is pending or with respect to which any appeal has been finally decided and no further appeal or petition for certiorari can be taken or

granted (including by reason of the fact that the time for taking such further appeal or petition has expired); or (ii) a stipulation or other agreement (including any binding arbitration award) that has the effect of any such final judgment, order, or other decree.

1.11 "Future Action Claim" means any claim against the Company that, based on facts known to the Company or the Trust on or before December 18, 2001, is likely to arise or become known prior to the expiration of the Claims Assertion Date and that is the subject of an action, suit, or proceeding to which the Company or the Trust is made a party after the Effective Date but prior to the expiration of the Claims Assertion Date.

1.12 "Future Fees and Expenses" means all costs and expenses, including, but not limited to, reasonable fees and expenses of attorneys, investigators, experts, and consultants, incurred by or on behalf of the Company or the Trust on and after the Effective Date in connection with (1) Plan Claims, (2) any claims that the Company or the Trust may determine should be asserted by or on behalf of the Company or the Trust, and (3) any other acts, activities, or transactions that either the Company or the Trust shall reasonably determine are necessary or useful with respect to the winding up of the Company's business and affairs.

1.13 "Incurred But Not Reported Claim or Loss" or "IBNR" means all costs and expenses associated with a claim or loss, the damage or injury associated therewith having taken place in whole or in part, but which claim or loss has not been reported to the Company as of the Effective Date.

1.14 "Insurance Policy" means any insurance policy or other agreement under which the Company or the Trust is a named insured or is otherwise entitled to any coverage or other benefits relating to any potential or actual liability or expenditure.

1.15 "NMI Receivable" shall have the meaning set forth in the recitals hereof.

1.16 "Pending Action Claim" means any claim against the Company that is the subject of a pending action, suit, or proceeding to which the Company is a party as of the Effective Date.

1.17 "Person" means an individual, partnership, corporation, trust, estate, association, or any other entity.

1.18 "Plan" means the Amended and Restated Plan of Distribution of the Company, dated as of March 9, 2001.

1.19 "Plan Claim" means (1) any Pending Action Claim, (2) any Future Fees and Expenses; (3) any Contingent or Conditional Contract Claim, (4) any Future Action Claim, or (5) any other claim against the Company or the Trust that, based on facts known to the Company or the Trust on or before December 18, 2001, is likely to arise or become known prior to expiration of the Claims Assertion Date and that is asserted prior to expiration of the Claims Assertion Date; provided, however, that the term "Plan Claim" excludes all claims and obligations paid or otherwise satisfied in full by or on behalf of the Company prior to the Effective Date.

1.20 "Plan Obligation" means (a) any Pre-Existing Obligation, and (b) any Plan Claim that (i) has been determined by the Company or the Trust to be properly payable by the

Company or the Trust or (ii) has been reduced to a Final Judgment or that has been settled pursuant to a written settlement agreement between the claimant or potential claimant and the Company or the Trust, which agreement fully and finally settles such Plan Claim (but need not settle all claims pending between the claimant and the Company or the Trust) and which agreement is binding and final as to such Plan Claim and any Person claiming through such claimant.

1.21 "Pre-Existing Obligation" means an obligation incurred by the Company prior to the Effective Date that has been determined by the Company prior to the Effective Date to be properly payable but that has not been paid in full as of the Effective Date.

1.22 "Primary Beneficiary" shall have the meaning set forth in Sections 4.1 and 4.2(a).

1.23 "Protected Party" means any Person who was or is a party or is threatened to be made a party to any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative, including any action or suit by or in the right of the Trust to procure a judgment in its favor, by reason of the fact that such Person is or was the Trustee, or an officer or director of the Company or of the Trustee.

1.24 "Trust Effective Date" shall have the meaning set forth in Section 2.3 hereof.

1.25 "Trust" means the EPEC Oil Company Liquidating Trust established pursuant to this Trust Agreement.

1.26 "Trust Agreement" means this EPEC Oil Company Liquidating Trust Agreement.

1.27 "Trust Property" shall have the meaning set forth in Section 2.3 hereof.

1.28 "Trustee" means El Paso Energy E.S.T. Company, a Delaware corporation, and any successor trustee, serving as trustee pursuant to the terms and conditions of the Plan and this Trust Agreement.

1.29 "Termination Date" shall have the meaning set forth in Section 3.1 of this Trust Agreement.

1.30 "Undertaking and Agreement" means the undertaking and agreement by and among Midwestern Gas Transmission Company, a Delaware corporation and the sole stockholder of the Company ("Midwestern"), El Paso Tennessee Pipeline Co., a Delaware corporation ("EPTP") and the Trust dated as of March 9, 2001, as amended from time to time.

ARTICLE II

DECLARATION OF TRUST

2.1. Creation and Name; Appointment of Trustee.

(a) There is hereby created a trust, which shall be known as the EPEC Oil Company Liquidating Trust, and the Trustee shall transact the affairs of the Trust in that name.

(b) The Company hereby appoints El Paso Energy E.S.T. Company, a Delaware corporation, as the Trustee of the Trust under this Agreement, effective as of the date hereof, to have all the rights, powers, and duties of the Trustee as set forth herein and the Trustee accepts such appointment.

2.2 Purposes. The primary purposes of the Trust are (i) to facilitate the liquidation and orderly winding up of the business and affairs of the Company and not to continue or engage in the conduct of a trade or business; (ii) in connection therewith, to preserve and administer the rights and assets of the Company and the Trust, administer Plan Claims, and pay or otherwise provide for Plan Obligations; and (iii) to engage only in such activities as are necessary, suitable, or convenient to accomplish the foregoing.

2.3. Trust Assets and Satisfaction of Plan Obligations. In accordance with the Plan, on March 9, 2001 (the "Trust Effective Date"), in full satisfaction and discharge of the Company's obligations with respect to Plan Obligations, the Trust shall succeed by operation of Delaware law and the Plan to all of the Company's right, title, and interest in and to (i) the Undertaking and Agreement, (ii) all of the Company's other assets as of the Trust Effective Date (other than the NMI Receivable), including but not limited to all insurance policies, rights and proceeds relating thereto, all claims, demands, causes of action and choses in action, including without limitation contribution claims, cross-claims, subrogation claims and indemnity claims such as but not limited to claims advanced in *Kern County Land Co. v. California Union Ins. Co.*, No. 991097 (Cal. Sup. Ct. San Francisco Cty.), and claims arising under any and all environmental statutes, rules and regulations, IBNR, and related contractual, quasi-contractual, extra-contractual and common law theories of recovery and (iii) any other assets to which the Company would otherwise have been entitled after the Trust Effective Date (the "Trust Property"). The Trustee hereby expressly agrees to accept the Trust Property as of the Trust Effective Date. The Trustee hereby agrees that, effective as

of the Trust Effective Date, the Trustee shall be bound by the terms and provisions of the Plan and this Trust Agreement and shall satisfy out of the assets of the Trust and in accordance with the terms of the Plan and this Trust Agreement all Plan Obligations and the Company shall have no further financial or other responsibility with respect thereto. The Trust shall have all defenses, crossclaims, counterclaims, claims for contribution or indemnification, and rights to liens, offsets, and recoupment to which the Company would otherwise be entitled.

2.4 Declaration of Trust. The Trustee hereby declares that it will hold the Trust Property in trust upon and subject to the conditions set forth herein. It is the intention of the parties hereto that the Trust constitute a liquidating trust under Section 301.7701-4(d) of the Treasury Regulations promulgated under the Code.

ARTICLE III

TERM OF TRUST

3.1 Term. The term of the Trust shall commence on the Trust Effective Date. The term of the Trust shall terminate upon the later to occur of: (i) that date on which all Plan Obligations have been finally determined and paid, the Claims Assertion Date has passed, and the Final Liquidating Distribution, if any, has been made, and (ii) January 30, 2009 (the later of such dates being the "Termination Date"). For all purposes of this Agreement, the date on which all Plan Obligations have been finally determined and paid shall be a date determined solely in the discretion of the Trustee hereunder.

ARTICLE IV

INTERESTS IN THE TRUST

4.1 Initial Primary Beneficiary. Except as otherwise provided in Section 4.2, EPTP, in consideration for its obligations pursuant to the Undertaking and Agreement, shall be the initial Primary Beneficiary and as such shall have an undivided interest in the Trust Property. This provision shall not affect the payment of insurance proceeds to or on behalf of the insureds under the Company's insurance policies, and nothing herein shall constitute an assignment of any insurance policy, right or proceeds therein. To the extent required by law, beneficiaries of the Trust shall also include those persons or entities entitled to receive or receiving insurance proceeds from all insurance policies held by the Trust or to which the Trust has rights or access, but only to the extent of such beneficiaries' interest therein.

4.2 Transfers of Interests in the Trust.

(a) The interest of the Primary Beneficiary in the Trust shall not be transferable and no transfers shall be registered on the books of the Trust maintained by or for the account of the Trustee except that the Primary Beneficiary may transfer all (but not part) of its interest in the Trust to an Affiliate (which Affiliate shall thereafter, for all purposes of this Trust Agreement, be the Primary Beneficiary).

(b) The interest of Primary Beneficiary in the Trust shall be uncertificated.

(c) The Trustee may establish such procedures as the Trustee may deem reasonable pursuant to which Primary Beneficiary may notify the Trustee of any change in

address of the Primary Beneficiary for recordation in the books of the Trust maintained by or for the account of the Trustee.

ARTICLE V

PAYMENT OBLIGATIONS

5.1 Obligations Payable by the Trust. The Trust shall be required to pay or make provision for the payment of only Plan Obligations, in accordance with the terms of the Plan and this Agreement.

5.2 Payment of Obligations. The Trustee shall, out of the assets of the Trust, pay or make provision for the payment of Plan Obligations as such obligations become due.

5.3 Source of Payments.

(a) All payments by or on behalf of the Trust shall be made from (i) principal or income or both of the Trust as the Trustee shall determine in its absolute discretion, (ii) payments made to or on behalf of the Trust pursuant to the Undertaking and Agreement, and (iii) recoveries from insurance policies and other rights and claims of the Company or the Trust.

(b) None of the Trustee, or any agent or employee of the Trust, or any director, officer, employee, or agent of the Company, Midwestern, EPTP, or the Trustee, shall be liable for the payment of any Trust expense, liability, or obligation, and no Person shall look to any of the foregoing Persons for payment of any such expense, liability, or obligation. Except to the extent expressly provided in the Undertaking and Agreement, neither Midwestern nor EPTP shall be liable or responsible for any Trust expense, liability,

or obligation, and no Person shall look to Midwestern or EPTP for the payment of any such expense, liability, or obligation.

5.4 Suits Involving the Company. On and after the Trust Effective Date, the Trust shall, as appropriate, defend, prosecute, participate in, or otherwise take action in connection with any action, suit, or proceeding involving the Company or the Trust. The Trust or Trustee may appear or take action in any such action, suit, or proceeding in the name of and on behalf of the Company, and formal substitution shall not be required unless required by applicable law, local rules of practice, or court order.

ARTICLE VI

DUTIES: POWERS; TRUST ADMINISTRATION

6.1 Duties. The Trustee shall be responsible for the administration of the Trust and the management and distribution of the assets thereof in accordance with the terms of this Trust Agreement and the Plan.

6.2 Powers.

(a) Subject to the limitations set forth in this Trust Agreement and the Plan, the Trustee shall have the power to take any and all such actions as in the judgment of the Trustee are necessary or useful to effectuate the purposes of the Trust or the Plan, including without limitation each power expressly granted in subsection (b) below and any power reasonably incidental thereto but the Trust shall not have the power to continue the business of the Company for or on behalf of the Company or to engage in the conduct of any other trade or business.

(b) Without limiting the generality of subsection (a) above, the Trustee shall have the power to:

(i) receive and hold the assets of the Trust, and invest monies held from time to time in the Trust;

(ii) administer and take all actions necessary or useful in connection with Plan Claims and pay or make reasonable provision for the payment of Plan Obligations, all in accordance with the Plan and this Trust Agreement;

(iii) prosecute, defend, and otherwise participate in, and take all actions necessary or useful in connection with, all actions, suits, and proceedings pending by or against or otherwise involving the Company or the Trust on and after the Effective Date;

(iv) act in the name of the Company, if necessary, with respect to any matters relating to the Company for which the Trust has assumed responsibility;

(v) settle any claims or threatened claims made by or against the Trust or the Company; provided that nothing herein shall be deemed to limit the Trustee's authority to settle fewer than all claims pending between any claimant and the Company or the Trust;

(vi) sue and be sued in the name of the Trust (or in the name of the Company) and participate, as a party or otherwise, in any judicial, administrative, arbitration, or other action, suit, or proceeding affecting the Company or the Trust, including, without limitation, any proceeding relating to the validity, construction, or interpretation of the Plan, this Trust Agreement, any insurance policy, or any common law right of action relating to

any asset, right, claim, cause of action, chose in action or obligation or asserted liability of the Company or the Trust;

(vii) determine whether any claims or potential claims belonging to the Company should be asserted by or on behalf of the Company and whether any action, suit, or proceeding should be commenced or continued by or on behalf of the Company in connection therewith;

(viii) with respect to any lawsuits formerly filed against the Company, and with respect to any action brought against the Company or the Trust or as to which the Trust is substituted as a party after the Effective Date, act in the same manner that the Company has or could have acted with respect to such lawsuits (including but not limited to deciding whether or not to appeal any judgment, order, or other decree) and be entitled to the same defenses and rights to assert claims, counterclaims, cross-claims, or claims for contribution or indemnification, and to negotiate settlements as the Company had or would have had in resolution of such lawsuits;

(ix) exercise all rights and benefits available to the Trust with respect to any Insurance Policy;

(x) borrow money and issue notes and other evidences of indebtedness of the Trust (which notes or other evidences of indebtedness may exonerate the Trustee from personal liability with respect thereto) as the Trustee deems necessary or appropriate in connection with the administration of the Trust.

(xi) hire such employees and engage such legal, financial, insurance, and accounting professionals, investment managers, alternative dispute resolution panelists, expert witnesses, and such other consultants, advisors, and agents as the Trustee deems necessary or useful in connection with the administration of the Plan and the Trust (including without limitation in connection with any action, suit, or proceeding involving the Company or the Trust), pay such Persons reasonable compensation for their services, and cause the Trust to indemnify such Persons on such terms as the Trustee deems reasonable;

(xii) withhold amounts from distributions pursuant hereto, and pay such amounts over to the appropriate taxing authorities;

(xiii) enter into such other arrangements with third parties as are deemed by the Trustee to be necessary or useful in carrying out the purposes of the Trust;

(xiv) register transfers of the interest in the Trust held by the Primary Beneficiary, all in accordance with the provisions of Section 4.2 hereof; and

(xv) execute and deliver on behalf of the Company or the Trust any and all instruments, agreements, certificates, or other documents and papers as the Trustee shall in its judgment deem necessary or useful in connection with the administration of Plan Claims, the payment or satisfaction of Plan Obligations, and the winding up of the Company's business and affairs.

(c) All determinations made by the Trustee in connection with the exercise of its powers hereunder shall be conclusive unless a court of competent jurisdiction determines that the Trustee has grossly abused its discretion.

6.3 Administration.

(a) The fiscal year of the Trust shall end on December 31 of each year.

(b) Except as otherwise provided herein, the corpus of the Trust shall be held by one or more substantial depository institutions under custodial agreements, pursuant to which a depository institution holds all investments and executes all trades in the name of the Trust and disburses funds as directed in writing by the Trustee.

(c) The Trustee shall maintain such books and records of the Trust, including such monthly, quarterly, or annual reports as the Trustee shall arrange, as are necessary and appropriate to reflect the financial history and current status of the Trust.

(d) Following the expiration of the period set forth in Section 278 of the DGCL with respect to the continuing existence as a body corporate of the Company following its dissolution, the Trustee shall have standing to apply to the Court of Chancery of the State of Delaware pursuant to Section 279 of the DGCL (or any successor provision) for the appointment of a receiver of and for the Company, and the Trustee may apply to the Court of Chancery of the State of Delaware for the appointment of a receiver of and for the Company if the Trustee determines that the appointment of a trustee or receiver is necessary or appropriate.

6.4 Taxes. In the event that any tax is imposed on the Trust, the Trustee shall charge such tax against amounts otherwise distributable to the Primary Beneficiary. The Trustee is authorized to retain from amounts otherwise distributable to the Primary Beneficiary sufficient funds to pay or provide for the payment of, and to actually pay, such

tax as is legally owed by the Trust (but such authorization shall not prevent the Trustee from contesting any such tax in the appropriate proceedings, and withholding payment of such tax if permitted by law, pending the outcome of such proceedings).

6.5 Tax Returns. The Trustee shall prepare or cause to be prepared all Federal, state and local tax returns for the Trust. For Federal income tax purposes, the Trustee shall report all income of the Trust or cause such income to be reported consistent with the Trust's status as a grantor trust pursuant to Section 1.671-4(a) of the Treasury Regulations promulgated under the Code.

ARTICLE VII

THE TRUSTEE

7.1 Number. There shall be one trustee serving as the Trustee (or its successor) at all-times

7.2 Term of Service.

(a) The Trustee shall serve until the earlier of the Termination Date or the appointment of any successor Trustee.

(b) The Trustee may resign at any time by written notice to the Primary Beneficiary and each Person who was serving as a director of the Company as of the Effective Date. Such notice shall specify a date when such resignation shall take effect, which date shall not be less than ninety (90) days after the date such notice is given; provided, however, that such resignation shall not be effective unless and until a successor is available to assume the duties of Trustee.

7.3 Compensation and Expenses of Trustee. The Trustee shall not be compensated for services as Trustee.

7.4 Successor Trustee. The Trustee shall appoint its successor and such successor Trustee may, in turn, appoint its successor. The appointment of such successor shall be made by specific reference hereto in a written instrument that the Trustee shall execute and deliver to the chosen successor and the Primary Beneficiary. In the event a vacancy occurs for which a successor has not been appointed, then the Primary Beneficiary shall appoint a successor Trustee by specific reference hereto in a written instrument that the Primary Beneficiary shall execute and deliver to the chosen successor. The original Trustee and any successor or substitute Trustee named herein shall serve without bond. Except as otherwise expressly indicated, each successor or substitute Trustee shall have all the powers and immunities herein given to the original Trustee.

7.5 Consultation with and Reliance upon Experts. The Trustee may, but shall not be required to, consult with counsel, accountants, investment advisers and managers, insurance consultants, stock brokers, appraisers, and other Persons deemed by the Trustee to be qualified to assist the Trustee on the matters submitted to them.

7.6 Limitation upon Liability of Trustee.

(a) Not Acting in Individual Capacity. In accepting the Trust Property in trust hereunder, the Trustee acts solely as trustee hereunder and not in its individual capacity, and all persons having any claim against the Trustee by reason of the transactions

contemplated by this Agreement shall look only to the Trust Property for payment or satisfaction thereof.

(b) Exculpatory Provisions. The Trustee shall be not liable to the Trust, Midwestern, EPTP, any other Primary Beneficiary, or any holder of any claim except for its own gross negligence or willful misconduct. The Trustee shall not be liable for any act or omission of any agent, advisor, consultant, or employee of the Trust, unless the Trustee acted with gross negligence or willful misconduct in the selection or retention of such agent, advisor, consultant, or employee. No provision of this Agreement shall require the Trustee to expend or risk its funds or otherwise incur any financial liability in the performance of any of its rights or powers hereunder, if the Trustee shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured or provided to it. The Trustee shall not be responsible for or in respect of the validity or sufficiency of this Agreement or for the due execution hereof by the Company.

(c) Protection on Distributions. The Trustee shall be protected in continuing to make distributions hereunder until the Trustee shall have actual knowledge of the happening of an event or any other occurrence that would cause such distributions to be unlawful.

7.7 Indemnification of Protected Parties.

(a) The Trustee shall indemnify out of the assets of the Trust any Protected Party against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement or otherwise actually or reasonably incurred by such Protected Party in

connection with any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action or suit by or in the right of the Company or the Trust) if such Protected Party acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company or the Trust and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit, or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that a Protected Party did not act in good faith and in a manner that such Protected Party reasonably believed to be in or not opposed to the best interests of the Company or the Trust, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.

(b) The Trustee shall indemnify out of the assets of the Trust any Protected Party against expenses (including attorneys' fees) actually and reasonably incurred by such Protected Party in connection with the defense or settlement of any action or suit by or in the right of the Company or the Trust to procure a judgment in its favor if such Protected Party acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company or the Trust, except that no indemnification shall be made in respect to any claim, issue, or matter as to which such Protected Party shall have been adjudged to be liable for gross negligence or willful misconduct in the performance of his or her duty to the Company or the Trust unless and only to the extent that a court of competent jurisdiction (including the court in which such action or suit was

brought) shall determine upon application that, despite the adjudication of liability but in view of all circumstances of the case, such Protected Party is fairly and reasonably entitled to indemnity for such expenses that such court shall deem proper.

(c) To the extent that a Protected Party has been successful on the merits or otherwise in the defense of any action, suit, or proceeding referred to in subparagraphs (a) and (b), or in the defense of any claim, issue, or matter therein, such Protected Party shall be indemnified by the Trustee out of the assets of the Trust against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith.

(d) Unless ordered by a court of competent jurisdiction, any indemnification under subparagraphs (a) and (b) shall be made by the Trustee only upon a determination that the indemnification of the Protected Party in question is proper in the circumstances because he or she has met the applicable standards of conduct set forth in subparagraphs (a) and (b). Such determination shall be made by independent legal counsel in a written opinion.

(e) Expenses (including attorneys' fees) reasonably incurred by a Protected Party in defending a civil, criminal, administrative, or investigative action, suit, or proceeding may be paid by the Trustee out of the assets of the Trust in advance of the final disposition of such action, suit, or proceeding upon receipt of an undertaking by or on behalf of the Protected Party in question to repay such amount unless it shall ultimately be determined that he or she is entitled to be indemnified by the Trust as authorized by this Section.

(f) The indemnification and advancement of expenses provided by this Section shall not be deemed exclusive of any other rights to which any Protected Party may otherwise be entitled, and shall continue as to a Person who has ceased to be a Protected Party and shall inure to the benefit of the heirs, executors, administrators, and successors of such Protected Party.

(g) Notwithstanding anything herein to the contrary, any claim for indemnification or the advancement of expenses by a current or former director or officer of the Company pursuant to the terms of the Company's certificate of incorporation, the Company's bylaws, any agreement between such director or officer and the Company, or Section 145 of the DGCL, which claim arises by reason of any transaction, event, occurrence, action, inaction, or decision occurring on or before the Effective Date or by reason of any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative arising by reason of such transaction, event, occurrence, action, inaction, or decision, shall be treated as a Contingent or Conditional Contract Claim under the Plan and shall be governed by the Company's certificate of incorporation, the Company's bylaws, the agreement between such officer or director and the Company, and/or Section 145 of the DGCL, as the case may be.

(h) Notwithstanding anything herein to the contrary, the provisions herein regarding indemnification shall not supplant, alter, amend or modify any other indemnification, defense or hold harmless agreement or obligation expressed or implied by law or contract including without limitation any and all such obligations expressed or

implied in insurance policies issued to or covering the Company, any insured under such policies (including "named insureds" and "additional insureds"), and any beneficiary of the Trust. Any such defense or indemnification shall take precedence over any indemnity expressed herein and any payment pursuant to this provision shall be treated as an advance pending receipt of insurance proceeds in the event that the Company, the Trust or any beneficiary asserts that any policy of insurance available to the Company, the Trust or any beneficiary of the Trust is responsive in lieu of or in conjunction with any indemnity expressed herein.

7.8 Trustee's Lien. The Trustee and any other Protected Party shall have a prior lien upon the assets of the Trust to secure payment of any amounts payable to the Trustee pursuant to Section 7.7.

7.9 Other Activities. Nothing in this Trust Agreement shall preclude the Trustee from engaging in any other activities, business or otherwise.

ARTICLE VIII

LIQUIDATING DISTRIBUTIONS, FINAL LIQUIDATING DISTRIBUTION, AND TERMINATION

8.1 The Trustee may (i) conduct a review of all payments made to and from the Company or the Trust on and subsequent to the Effective Date and of all anticipated and pending claims against and obligations of the Company or the Trust, including Plan Claims; (ii) consider the extent to which the value of the assets held by the Trust exceeds the amount of anticipated payments to be made out of the assets of the Trust in connection with Plan Obligations; and (iii) consider any other information the Trustee deems relevant; and, based

on such considerations, the Trustee may, in the Trustee's sole discretion, distribute, on one or more occasions and prior to the time a Final Liquidating Distribution is made pursuant to Section 8.2 hereof, such amount from the assets of the Trust as the Trustee, in the Trustee's sole discretion, deems reasonable and appropriate, ratably to the Primary Beneficiary (an "Interim Liquidating Distribution"); provided that the Trustee must be reasonably satisfied that the value of the assets remaining in the Trust following each such distribution will be reasonably likely to be sufficient to satisfy all remaining Plan Obligations that are known to the Trustee or that may arise in connection with Plan Claims that are likely to arise or become known to the Trustee prior to the expiration of the Claims Assertion Date.

8.2 As soon as practicable after all Plan Obligations have been paid and the Claims Assertion Date has passed, the Trustee shall distribute all assets remaining in the Trust, if any, ratably (except as set forth in Section 8.4 hereof) to the Primary Beneficiary (the "Final Liquidating Distribution").

8.3 The Trust shall automatically terminate on the Termination Date. Prior to the Termination Date, the dissolution, termination, insolvency, or bankruptcy of any beneficiary (including any Primary Beneficiary) or any Trustee shall not result in the termination or dissolution of the Trust.

8.4 All amounts required to be withheld pursuant to the Code or any provision of any state, local, or foreign tax law with respect to the Interim Liquidating Distributions, if any, and the Final Liquidating Distribution, if any, shall be treated as amounts paid or distributed, as the case may be, to the Primary Beneficiary with respect to which such

amounts were withheld pursuant to this Section 8.4 for all purposes of the Plan and this Trust Agreement. The Company or the Trustee, as the case may be, shall be authorized to withhold from any such distributions or payments, as the case may be, and to pay over to any federal, state, and local government or any foreign government, any amounts required to be so withheld pursuant to the Code or any provisions of any other federal, state, local, or foreign law and shall reduce by the amount thereof the otherwise pro rata distribution to the Primary Beneficiary with respect to which such amount was withheld.

ARTICLE IX

CONCERNING THE TRUSTOR AND THE PRIMARY BENEFICIARY

9.1 General Intentions. The Trustor and the Primary Beneficiary affirm their intentions that the Trust qualify as a liquidating trust under the Code, and, because the Trust is not to engage in any business activities whatsoever, the Trustor and the Primary Beneficiary do not believe that their consents to activities of the Trust should ever be necessary. In the event any action shall require consent of the Trustor and/or any beneficiary (including the Primary Beneficiary), and except to the extent expressly provided otherwise in this Agreement, consent of the Trustor and/or such beneficiaries shall be deemed given only to the extent that all of the beneficiaries and/or the Trustor, as the case may be, shall be required.

9.2 Limitation on Liability. To the extent permitted by law, the beneficiaries (including the Primary Beneficiary) shall be entitled to the same limitation of per-

liability extended to stockholders of private corporations for profit organized under the General Corporation Law of the State of Delaware.

ARTICLE X

GENERAL PROVISIONS

10.1 Incorporation of Plan. The Plan shall be deemed to be incorporated herein by reference as if the terms of the Plan were fully set forth herein. Any conflict between the terms and conditions of the Plan and the terms and conditions of this Trust Agreement shall be resolved by the enforcement of the terms and conditions of the Plan.

10.2 Amendments. This Trust Agreement may be modified, supplemented, or amended at any time by mutual agreement, in writing, of the Trustee, the Company, and the Primary Beneficiary; provided, however, that following the expiration of the period set forth in Section 278 of the DGCL this Trust Agreement may be modified, supplemented, or amended at any time by mutual agreement, in writing, of the Trustee and the Primary Beneficiary, and the agreement or consent of the Company shall not be required.

10.3 Jurisdiction. The courts of the State of Delaware (including, without limitation, the Court of Chancery of the State of Delaware) shall have jurisdiction to hear and decide any claim or action against the Trustee or the Trust based on the administration or construction of the Trust or the Plan, or the performance of the Trustee's rights, duties, or obligations under this Trust Agreement or the Plan. The Trustee (and each successor Trustee by acceptance of its appointment as such) irrevocably consents to the jurisdiction of the courts of the State of Delaware in any and all actions against the Trust or the Trustee based

on the administration or construction of the Trust, or the performance of the Trustee's rights, duties, or obligations under this Trust Agreement or the Plan, and the Trustee (and each successor Trustee by acceptance of its appointment as such) irrevocably consents to service of process by first class United States mail, registered or certified, return receipt requested, postage prepaid, to the address at which the Trustee is to receive notice in accordance with Section 10.6 of this Trust Agreement.

10.4 Severability. Any provision of this Trust Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provisions in any other jurisdiction.

10.5 Headings. The headings of the various Articles and sections herein are for convenience of reference only and shall not define or limit any of the terms or provisions hereof.

10.6 Notices. Any notices to the Trust or the Trustee, to the Company, or to EPTP shall be addressed as follows, or to such other address or addresses as may hereafter be furnished by any of them by like notice to the others:

To the Trust
or the Trustee:

c/o El Paso Energy E.S.T. Company
El Paso Building
1001 Louisiana Street
Houston, Texas 77002
Attn: Corporate Secretary
Fax: (713) 420-4099

To the Company:

EPEC Oil Company
El Paso Building
1001 Louisiana Street
Houston, Texas 77002
Attn: Corporate Secretary
Fax: (713) 420-4099

To EPTP:

El Paso Tennessee Pipeline Co.
El Paso Building
1001 Louisiana Street
Houston, Texas 77002
Attn: Corporate Secretary
Fax: (713) 420-4099

Any notices to the persons serving as directors of the Company as of the Effective Date shall be addressed as follows, or to such other address or addresses as may hereafter be furnished by any such director to the Trust at the address designated for the receipt of notice by the Trust in accordance with this Section 10.6:

c/o El Paso Corporation
El Paso Building
1001 Louisiana Street
Houston, Texas 77002
Attn: Corporate Secretary

Fax: (713) 430-4099

Such notices shall be in writing and shall be personally delivered or sent by first class United States mail, registered or certified, return receipt requested, postage prepaid. All such notices and communications to the Trustee shall be effective when delivered at the designated address. All other notices and communications shall be effective when personally delivered or when deposited in the mails.

Anything herein to the contrary notwithstanding, following expiration of the period set forth in Section 278 of the DGCL, no notice of any change of address for the receipt of notice pursuant to this Section 10.6 need be furnished to the Company by any of the Trust, the Trustee, or EPTP.

10.7 Counterparts. This Trust Agreement may be executed in counterparts, each of which shall constitute an original, but all of which together shall constitute but one and the same instrument.

10.8 Entire Trust Agreement. This Trust Agreement and the Plan together contain the entire agreement of the parties relating to the subject matter hereof.

10.9 Governing Law. All questions pertaining to the validity and construction of this Trust Agreement or the administration of this Trust shall be determined in accordance with the laws of the State of Delaware; provided, however, that this provision shall not affect the law applicable to the resolution or discharge of any insurance claim or right or any loss, claim, demand, cause of action or chose in action associated therewith. The provisions of Section 3540 of Title 12 of the Delaware Code shall not apply to this Trust.

IN WITNESS WHEREOF, the parties have executed this Trust Agreement the day
and year first above written.

TRUSTOR:
EPEC Oil Company

By: H. Brent Austin
Name: H. Brent Austin
Title: President

TRUSTEE:
El Paso Energy E.S.T. Company

By: H. Brent Austin
Name: H. Brent Austin
Title: Executive Vice President

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Plan of Reorganization

By and Between

WILCOX OIL COMPANY

TENNESSEE GAS TRANSMISSION COMPANY

W X C COMPANY

Dated May 13, 1964

PLAN OF REORGANIZATION

Table of Contents

<i>Article</i>	<i>Page</i>
1 Representations and Warranties of Wilcox.....	1
2 Representations and Warranties of Tennessee and W X C.....	4
3 Ordinary Course of Business.....	5
4 Access to Books, Records, Accounts and Properties.....	6
5 Covenants of Wilcox.....	6
6 Covenants of Tennessee.....	7
7 Covenants of Wilcox, W X C and Tennessee.....	7
8 Conditions Precedent to the Exchange by W X C.....	9
9 Conditions Precedent to the Exchange by Wilcox.....	10
10 Request for Tax Ruling.....	11
11 Employment Policies.....	12
12 Gas Sales Contracts.....	12
13 Registration Matters.....	12
14 Termination of Plan of Reorganization.....	13
15 Confidential Treatment of Wilcox Information.....	13
16 Assignment and Amendment of the Plan of Reorganization.....	13
17 Notices	14
18 Miscellaneous	14

PLAN OF REORGANIZATION

This Plan of Reorganization made this the 13th day of May, 1964, by and between WILCOX OIL COMPANY, a Delaware corporation (hereinafter sometimes called "Wilcox"), with its principal office and place of business at Tulsa, Oklahoma, TENNESSEE GAS TRANSMISSION COMPANY, a Delaware corporation (hereinafter sometimes called "Tennessee"), with its principal office and place of business at Houston, Texas, and WXC COMPANY, a Delaware corporation (hereinafter sometimes called "W X C"), with its principal office and place of business at Houston, Texas.

RECITALS

The reorganization will comprise the transfer to W X C of all the assets, properties, business and good will of Wilcox (and the assumption by W X C of Wilcox's liabilities as hereinafter provided) in exchange solely for shares of \$5.00 par value voting common stock of Tennessee owned or to be owned by W X C, the prompt dissolution of Wilcox and the distribution of such shares to the stockholders of Wilcox, all upon and subject to the terms and conditions of this Plan of Reorganization.

In consideration of the mutual benefits to be derived from this Plan of Reorganization and of the mutual agreements hereinafter contained, the parties hereto do hereby agree as follows:

ARTICLE 1. *Representations and Warranties of Wilcox*

1.1 Wilcox is a corporation duly organized and existing and in good standing under the laws of the State of Delaware and is qualified to do business in, and is a foreign corporation in good standing in the States of Arkansas, Colorado, Kansas, Louisiana, Montana, Nebraska, New Mexico, Oklahoma and Texas.

1.2 Wilcox is and at the Closing Date (as that term is hereinafter defined) will be authorized to issue 1,200,000 shares of its \$5.00 par value common stock of which 694,234-3/5ths shares of such common stock are and will be outstanding, all of one class, all validly issued, full paid and nonassessable. No other class of stock is authorized or issued and no restricted stock options are presently outstanding and unexercised.

1.3 Wilcox has no subsidiaries and owns no securities of any other corporation, domestic or foreign, except for twenty-two and one-half (22½) shares of \$100 par value Class A common stock in Oklahoma Hotel Building Company.

1.4 Annexed hereto as Exhibit A are a Balance Sheet and Statement of Income and Retained Earnings of Wilcox for the year ended December 31, 1963, certified by Arthur Young & Company, Independent Public Accountants, and an unaudited Balance Sheet of Wilcox as of March 31, 1964, and an unaudited Statement of Income and Expenses, dated March 31, 1964, covering the quarter ended March 31, 1964. All such statements present fairly the condition of Wilcox and the results of its operations as of the respective dates of such balance sheets and for the respective periods indicated in said statements.

1.5 Wilcox has heretofore delivered to W X C and Tennessee a Statement of Lease Production, Income and Direct Expense for the calendar year 1963 and Statements of Lease Production, Income and Direct Expense for the months of January, February and March, 1964. Such statements present fairly the results of operations of Wilcox for the respective periods.

1.6 Except as listed in the schedule annexed hereto as Exhibit B, Wilcox has no liabilities, absolute or contingent, known to the officers and directors of Wilcox which are not shown or provided for on the unaudited Balance Sheet of Wilcox as of March 31, 1964, annexed as part of Exhibit A.

1.7 The properties and assets of Wilcox to be conveyed to W X C pursuant to this Plan of Reorganization shall include all properties and assets of Wilcox of whatsoever nature, real, personal or mixed, tangible or intangible, (save and except only the corporate charter, by-laws, stock books and minute books of Wilcox) including, without limitation, the following:

(i) All of the producing oil and gas leases and producing royalty, overriding royalty and mineral interests of Wilcox as described in Exhibit C-1, subject to the Operating Agreements and other Contracts affecting such leases and the lands covered thereby as described in said Exhibit;

(ii) All of the nonproducing oil and gas leases and nonproducing royalty, overriding royalty and mineral interests of Wilcox as described in Exhibit C-2 hereof, subject to the Operating Agreements and other Contracts described in said Exhibit; and further subject to the release of any of such leases because of the expiration of primary terms or brought about by other lease contract provisions;

(iii) All of Wilcox's other interests in land (including, without limitation, all buildings and other improvements thereon) as described in Exhibit C-3 hereof;

(iv) All of the buildings and improvements, office furniture, fixtures, equipment and appliances located on the real property covered by the leases and lands of Wilcox or wheresoever situated;

(v) All of the items of tangible and intangible personal property used or obtained for use in connection with Wilcox's business including, but not limited to, all of the items of personal property used in connection with Wilcox's business of exploring for, producing and marketing oil, gas and other minerals;

(vi) All of the oil and gas wells, oil field materials and supplies wheresoever located, conduits, pipes and other related equipment and fixtures, tanks, batteries, plants, interests in plants, wells (of whatsoever nature), seismographical, geological and geophysical data and records, logs and other data related to leaseholds hereinabove referred to and any other leaseholds (none of which data, records and information shall be reproduced for the benefit of any person, firm or corporation except Tennessee and W X C from and after the date hereof), maps, records, abstracts, indicia of title, title opinions, books, well and production files, division order files and all other files and other records of whatsoever nature related to Wilcox's property, operations or business;

(vii) All accounts receivable, notes receivable, and mortgages receivable and all other receivables as may be reflected upon the unaudited Balance Sheet of Wilcox as of March 31, 1964, adjusted to Closing Date by transactions in the ordinary course of business;

(viii) All inventory of crude oil and other hydrocarbon substances of Wilcox at Closing Date;

(ix) All cash on deposit and in hand at the Closing Date, which cash as of March 31, 1964, was the sum of \$777,771.51 and all Certificates of Deposit, which as of March 31, 1964, aggregated the sum of \$1,850,000, and as adjusted to Closing Date by collections, payments and deposits made only through the ordinary conduct of Wilcox's business;

(x) All prepaid insurance and other prepaid expenses as shown on the books of Wilcox on March 31, 1964, as adjusted to Closing Date;

(xi) All contracts of any nature related to Wilcox's business including, without limitation, all contracts for the purchase or sale of oil, gas and/or other hydrocarbons, the purchase of supplies and materials, all Operating Agreements related to Wilcox's oil and gas leases or other properties, all utility contracts, rental agreements, lease contracts and other agreements; and

(xii) Twenty-two and one-half (22½) shares of \$100 par value Class A common stock in Oklahoma Hotel Building Company.

All properties to be conveyed pursuant to this Plan of Reorganization are hereinafter sometimes referred to collectively as "Subject Properties".

1.8 Since January 1, 1964, except for changes occurring in the ordinary course of business of Wilcox, there have been no material adverse changes in the financial condition or earnings of Wilcox. The directors and officers of Wilcox do not know, nor do they have any basis for knowledge of, nor do they have any reason to anticipate any litigation or other events or consequences materially adverse to Wilcox except for three suits now pending to which Wilcox is a party, described as follows:

(i) *Arrow Drilling Company vs Wilcox Oil Company*, Cause No. 99334, District Court of Tulsa County, Oklahoma, involving the costs and claims arising between the parties thereto from the drilling of a well in Beckham County, Oklahoma;

(ii) *Mounsey et al vs Wilcox Oil Company et al*, Cause No. CA 2-147, U. S. District Court for the Northern District of Texas, involving problems of unitization of certain lands in Lipscomb County, Texas, and in which the plaintiffs are seeking lease cancellation and damages;

(iii) *Ausmus vs Wilcox Oil Company*, Cause No. 8566, District Court of Beaver County, Oklahoma, in which a lease cancellation is sought.

All Federal and State tax returns of Wilcox required to be filed on or prior to March 31, 1964, have been filed and all such returns required to be filed prior to Closing Date will be filed by Wilcox. The directors and officers of Wilcox do not believe that there is any deficit for the payment of taxes in respect of any return filed for any prior year. All liabilities of Wilcox for Federal, State and local taxes for any period prior to March 31, 1964 (except ad valorem taxes for the current year which are not delinquent) have been paid or adequately provided for on the Balance Sheet of Wilcox dated March 31, 1964.

1.9 Since March 31, 1964, Wilcox has neither entered into any contract nor made any commitments which could constitute or be considered as liabilities as the same are defined in accordance with generally accepted accounting procedures and practices, consistently applied, or which in any way diminish the assets of Wilcox, except those incurred in the ordinary course of Wilcox's business of exploring for, producing and marketing oil, gas and other hydrocarbons.

1.10 To the best of the knowledge of Wilcox's directors and officers, all of Wilcox's oil and gas leases (producing and nonproducing) are in full force and effect; and Wilcox is in peaceable possession of the lands covered thereby; there are no arrears of rental payments thereunder; nor is Wilcox in default in the performance of any of the terms and conditions of any such lease or any contract pertaining to such leases; and Wilcox has no reason to anticipate the termination of any such leases, except in accordance with their own terms and provisions.

1.11 Since March 31, 1964, Wilcox has neither paid nor declared any dividends except for a dividend of 25 cents payable on each share of common stock of Wilcox outstanding on May 1, 1964, such dividend being payable on May 22, 1964, and further except for a dividend of 25 cents payable for each share of common stock of Wilcox to be declared in the event Closing Date is subsequent to July 21, 1964, such dividend to be payable on September 8, 1964, to holders of record on August 14, 1964.

1.12 As of the date of this Plan of Reorganization and through the Closing Date, Wilcox will not be obligated in any way to issue any of its shares of common stock to any person pursuant to any restricted stock option or pursuant to any agreement, stock right, warrant or other commitment.

1.13 Prior to March 31, 1964, Wilcox has made no distribution of any kind of any of its properties or assets to its stockholders, as such, since January 1, 1964 except for the dividend paid in the first quarter of 1964.

1.14 Wilcox has made no unusual increases in remuneration to any of its officers or employees except in respect of certain salary increases made to certain of its officers pursuant to action taken by its Board of Directors on April 13, 1964.

1.15 Wilcox has the legal power and right to enter into and perform the obligations cast

upon it by the terms and provisions of this Plan of Reorganization; and the consummation of the transactions contemplated by this Plan of Reorganization will not result in the breach or termination of any provision of or constitute a default under any agreements or instruments to which Wilcox is a party or by which it or any of its properties may be bound, subject only to the approval of its stockholders at the called stockholders meeting referred to in subparagraph (ii) of paragraph 8.1 hereof.

1.16 Wilcox has not entered into any agreement with any person, firm or corporation nor has Wilcox become indirectly a party to any agreement for the payment of any fee, commission or brokerage in connection with this Plan of Reorganization and the proposed exchange of shares of Tennessee for the properties and assets of Wilcox; and Wilcox is not a party to any contract, other than this Plan of Reorganization, under which any other party has any option or right to acquire by sale or exchange any portion of Wilcox's properties or assets.

1.17 The directors and officers of Wilcox know of no statute, rule or law, regulation or contract which would, (subject to the affirmative approval by the holders of two-thirds of the voting stock of Wilcox), inhibit (i) the exchange contemplated hereby or (ii) the complete liquidation and dissolution of Wilcox.

1.18 Wilcox is not a party to any (i) employment or management contract which cannot be terminated on notice of sixty (60) days or less, (ii) contract for the purchase of materials, supplies, or equipment in excess of requirements for normal operating inventories or for work in progress, (iii) contracts for the future sale of production over a period of more than one (1) year from the date hereof or (iv) pension, profit sharing or retirement plans or contracts or consulting agreements; except as shown in Exhibit B referred to in paragraph 1.6 hereof.

1.19 To the best of the knowledge, information and belief of its directors and officers, Wilcox has complied in all material respects with all laws, rules, regulations and ordinances applicable to its business.

1.20 Since March 31, 1964, there has been no material change in the business or condition, financial or otherwise, of Wilcox, from that shown in the unaudited Balance Sheet and Statement of Income and Expenses dated as of March 31, 1964, annexed hereto as a part of Exhibit A, other than changes occurring in the ordinary course of business, which changes have not materially adversely affected its business, properties or financial condition, and except as to the dividend declared and payable May 22, 1964, as referred to in paragraph 1.11 hereof.

1.21 The Board of Directors of Wilcox has duly approved this Plan of Reorganization and the transactions contemplated hereby (subject to the approval hereof by the stockholders of Wilcox) and has authorized the execution and delivery by Wilcox of this Plan of Reorganization to Tennessee and W X C.

ARTICLE 2. *Representations and Warranties of Tennessee and W X C*

Tennessee and W X C each represents and warrants:

2.1 Each, W X C and Tennessee, has been duly organized and each is a validly existing corporation in good standing under the laws of Delaware.

2.2 W X C is or will be at Closing Date a wholly owned subsidiary of Tennessee.

2.3 The shares of stock of Tennessee to be exchanged hereunder for all of the properties and assets of Wilcox contracted to be acquired hereunder are shares of common stock of the par value of \$5.00 per share (entitled to one vote per share) and such stock has been validly authorized by the Certificate of Incorporation (Agreement of Merger) of Tennessee, as amended, and the issuance thereof has been validly authorized by appropriate action of the Board of Directors of Tennessee or the Executive Committee of such Board of Directors, and such stock when issued pursuant hereto, will be validly issued and will be full paid and nonassessable.

2.4 The Balance Sheets as of December 31, 1963, and the related Statements of Income and Retained Earnings of Tennessee and its consolidated subsidiary companies for the three years ended December 31, 1963, and the Summary of Consolidated Earnings of Tennessee and its Consolidated Subsidiaries for the years ended December 31, 1959, 1960, 1961, 1962 and 1963, all certified by Arthur Andersen & Co., as set forth in the Prospectus constituting a part of the Registration Statement of Tennessee (Registration No. 2-22137) under the Securities Act of 1933, as amended, fairly present the financial condition of Tennessee and its subsidiaries consolidated as of December 31, 1963, and the results of their operations for the respective periods of said Statements of Income and of Retained Earnings and said Summary of Consolidated Earnings. All of such statements have been prepared in conformity with generally accepted accounting principles consistently applied except as otherwise stated in the notes to such statements.

2.5 Since December 31, 1963, there has been no material adverse change in the business or condition, financial or otherwise, of Tennessee and its consolidated subsidiary companies as shown in the prospectus referred to in paragraph 2.4 hereof other than changes occurring in the ordinary course of business, which changes have not had any material adverse effect upon its business, properties or financial condition.

2.6 The amount of the capital stock of Tennessee, including common stock, preferred stock and second preferred stock authorized, is as stated in the Prospectus included in the Registration Statement referred to in paragraph 2.4 hereof and the amount of such classes of stock outstanding as of the date hereof is the same as the amount stated in said Prospectus to have been outstanding at December 31, 1963, except for preferred stock purchased for sinking fund requirements since said date and except for 150,000 shares of preferred stock sold pursuant to said Prospectus and except for any shares of Tennessee common stock issued after December 31, 1963, upon conversion of any outstanding shares of its second preferred stock or upon exercise of employee restricted stock options.

2.7 The Board of Directors of W X C and the Executive Committee of the Board of Directors of Tennessee have each duly approved this Plan of Reorganization and the transactions contemplated herein and have authorized the execution and delivery hereof by its officers.

2.8 The consummation of the transaction contemplated by this Plan of Reorganization will not result in any breach of any of the terms, conditions or provisions of or constitute a default under or result in the creation of any lien, charge or encumbrance on any property or asset of W X C or Tennessee pursuant to their respective Certificates of Incorporation or by-laws or any indenture, agreement or instrument to which W X C or Tennessee is a party or by which either is bound.

2.9 The Prospectus, dated April 6, 1964, constituting a part of the Registration Statement of Tennessee (Registration No. 2-22137) under the Securities Act of 1933, as amended, as of the date thereof contains no untrue statement of a material fact and does not fail to state any material fact required to be stated therein or necessary to make the statements therein not misleading. Since April 6, 1964, there has been no material adverse change in the business, affairs, financial condition or earnings of Tennessee and its consolidated subsidiaries as disclosed in said Registration Statement and Prospectus other than as included in the information furnished by Tennessee to Wilcox for inclusion in the Wilcox Proxy Statement to be mailed to Wilcox stockholders in conjunction with the special meeting of stockholders referred to in subparagraph (ii) of paragraph 8.1 hereof.

ARTICLE 3. *Ordinary Course of Business*

3.1 Wilcox represents that during the period from March 31, 1964, to the date hereof, it has conducted and agrees that from the date hereof to the Closing Date (except for this Plan of Reorganization and transactions contemplated hereby) it will conduct the business and affairs of Wilcox only in their ordinary course or as may be expressly agreed to on behalf of Tennessee and W X C by Mr. R. E. McGee, a Senior Vice President of Tennessee, or any other person duly authorized by him or by Tennessee and W X C in writing. During the period from the date hereof to the Closing Date, Wilcox will not knowingly take any action other than in the ordinary course of business which would change the conduct of its business and affairs from the manner in which such

business and affairs were conducted from December 31, 1963, to the date of this Plan of Reorganization. For the purpose of this Plan of Reorganization, the phrase "ordinary course of business" shall mean the conduct and operation of the business of Wilcox of exploring for, producing and marketing oil, gas and other hydrocarbons and the transportation of such products, and other activities incident to such business, only in the manner which Wilcox conducted and operated its business during the one year period ended December 31, 1963, following its usual and ordinary accounting practices, ordinary accruals and ordinary expenditures for merchandise, insurance, rentals, exploration work and other ordinary expenses except in relation to the payment of the 25¢ per share dividend upon its common stock payable on May 22, 1964, and additional dividends as provided for herein.

ARTICLE 4. *Access to Books, Records, Accounts and Properties*

4.1 From and after the date of this Plan of Reorganization until Closing Date, Wilcox will

(i) give to Tennessee and W X C and their respective representatives full access at any reasonable time to all of the Subject Properties and all of Wilcox's books, records, tax returns, contracts and documents relating to the Subject Properties for any purpose including, but not limited to, the right to reproduce all or any portion thereof, and to make inventories thereof;

(ii) furnish to Tennessee and W X C all information with respect to the business, affairs and properties of Wilcox as Tennessee and/or W X C may from time to time reasonably request;

(iii) permit Tennessee and/or W X C and their representatives to examine all abstracts of title, title policies, title opinions, title files, ownership maps, contract files, division order files, records and surveys which Wilcox may have with respect to the Subject Properties and Wilcox, upon the request of Tennessee and/or W X C, will as promptly as possible and at least thirty (30) days prior to Closing Date submit to Tennessee and W X C such additional abstracts, title reports, opinions, status reports, certificates of title and certificates of facts as may be needed by Tennessee and/or W X C to verify the representations of Wilcox as to the title to which it holds to any of its properties;

(iv) keep in full force and effect insurance comparable in amount and scope of coverage to that now maintained by it in respect of any of its properties;

(v) use its best efforts to obtain waivers of preferential purchase rights vested in third parties as to any of the Subject Properties, if any; and

(vi) as requested by Tennessee and/or W X C use its best efforts up to the Closing Date to cure all title defects in any of the Subject Properties to be conveyed to W X C.

4.2 Wilcox will cause its independent public accountants, Arthur Young & Company, to make available to Tennessee and W X C and the agents or nominees of either of them, all working papers and records concerning their examinations of Wilcox's financial statements to and including December 31, 1963, and interim working papers and records from such date to the Closing Date. Tennessee, W X C and their agents shall also have the right of access to all of Wilcox's books of account, business records and other related documents and Tennessee shall have the right to arrange with its certified public accountants, Arthur Andersen & Co., for consultation with a member of the firm of Arthur Young & Company at such times as may be mutually convenient to such accounting firms for such discussions as Tennessee may consider desirable or necessary.

ARTICLE 5. *Covenants of Wilcox*

5.1 Wilcox covenants that from and after the date hereof and through the Closing Date, it will

(i) not declare or pay any dividend (except as referred to in paragraph 1.11 above) or make any distribution of its properties or assets or allow the issuance of any other stock of Wilcox, except in respect of the declaration of an additional dividend of 25¢ per share on its common stock on July 21, 1964, payable September 8, 1964, to holders of said stock of

record on August 14, 1964, in the event that the transactions contemplated by this Plan of Reorganization have not been finally consummated on or prior to August 14, 1964; provided, however, that in the event the Closing Date should be a date subsequent to October 1, 1964, Wilcox shall be permitted (if it so desires) to declare and pay a regular quarterly dividend in such amounts and at such times as the parties hereto shall agree;

(ii) not make any changes in its Articles of Incorporation or by-laws except as provided for herein;

(iii) not grant further restricted stock options to officers and/or employees to purchase shares of common stock of Wilcox;

(iv) not increase from and after April 13, 1964, the rate or form of compensation payable to any officer or employee of Wilcox except increases in salaries and other forms of compensation occasioned by collective bargaining under any labor contract or agreement;

(v) not dispose of any of the Subject Properties except in the ordinary course of Wilcox's business;

(vi) not incur any indebtedness except in the ordinary course of business nor allow any material adverse change to be made in the financial affairs of Wilcox nor allow any tax or other liability of Wilcox to be extended by waiver of the statutes of limitation without the prior written consent of W X C and Tennessee;

(vii) comply in all material respects with all applicable local, state and federal rules, laws and regulations, including those relative to the payment of income, franchise and other taxes, fees, imposts and charges due to be paid prior to the Closing Date;

(viii) grant to W X C and Tennessee the full and free access to properties and records as referred to in Article 4 hereof;

(ix) pay the costs and expenses incurred by it in effectuating and carrying out this Plan of Reorganization, including the fees and expenses of its counsel and accountants, documentary and transfer stamps required on the transfer of Subject Properties, and the fees and charges of its transfer agent, referred to in paragraph 7.4 hereof. After Closing Date, Wilcox will retain in a separate bank account cash in the amount not exceeding \$100,000 to pay all costs and expenses incurred by it in carrying out this Plan of Reorganization and in completely liquidating the corporation pursuant to Sections 271 and 275 of the Corporate Laws of the State of Delaware. Such cash shall be used only to pay such costs and expenses; any balance thereof remaining at the expiration of one hundred twenty (120) days following Closing Date shall be paid over to W X C.

ARTICLE 6. *Covenants of Tennessee*

6.1 Tennessee covenants that from and after the date hereof and through Closing Date, Tennessee (i) will not take any action which would change in any material respect the nature of its business; (ii) will not authorize or make any split-up of its common stock or any other change in the rights of the holders of shares of its common stock; and (iii) will not declare or pay any dividend or make any other distribution to the holders of its common stock in excess of quarterly dividends of 25¢ per share unless the transactions contemplated by this Plan of Reorganization have not been consummated on or prior to October 1, 1964.

6.2 As soon as practicable after the date hereof, Tennessee will furnish to Wilcox for inclusion in the proxy statement to be mailed to Wilcox stockholders pursuant to subparagraph (ii) of paragraph 8.1 information related to the financial condition, business and affairs of Tennessee and its subsidiaries.

ARTICLE 7. *Covenants of Wilcox, W X C and Tennessee*

7.1 Subject to all of the terms and conditions hereof and except for the sum to be reserved by Wilcox for the winding up of its affairs, Wilcox hereby agrees to convey, transfer, assign and deliver to W X C by conveyances containing covenants of special warranty, and W X C agrees to

acquire and accept by such conveyances and delivery from Wilcox on the Closing Date all of the assets and properties, business and good will of Wilcox of every kind and description, whether or not described in paragraph 1.7 of this Plan of Reorganization or any exhibit therein referred to, including, without limitation, all properties, tangible or intangible, real, personal or mixed, accounts receivable, bank accounts, cash, claims and rights under contracts of Wilcox, and all books and records of Wilcox related to its business, all as the same shall exist at the Closing Date. The assets and properties to be conveyed, transferred, assigned and delivered on the Closing Date shall, without limitation, include all assets and properties of Wilcox shown on the unaudited consolidated Balance Sheet of Wilcox as of March 31, 1964, annexed hereto as a part of Exhibit A, and all assets and properties thereafter acquired by Wilcox prior to the Closing Date except such of those as may have been disposed of prior to the Closing Date in the ordinary course of business or in the payment and discharge of liabilities of Wilcox.

7.2 Subject to the conditions herein set forth, from and after the Closing Date, W X C shall assume and agrees to pay, perform and discharge all debts, obligations, contracts and liabilities of Wilcox and (except for any actions based upon misfeasance or malfeasance) its officers and directors when acting in such capacities and when such debts, obligations, contracts and liabilities of Wilcox are imputed by law to such officers and directors, of any kind, character or description, whether accrued, absolute, contingent or otherwise, all as the same shall exist at the Closing Date; provided, however, that nothing in this paragraph 7.2 contained shall relieve Wilcox of its obligations under this Plan of Reorganization to distribute the shares of Tennessee common stock to the holders of Wilcox common stock in complete dissolution, winding up and liquidation of Wilcox.

7.3 Wilcox agrees that it will at any time and from time to time after the Closing Date, upon request of W X C and at W X C's expense, do, execute, acknowledge and deliver, and will cause to be done, executed, acknowledged and delivered, all such further acts, deeds, assignments, transfers, conveyances, powers of attorney and assurances as may be required for the better assigning, transferring, granting, conveying, assuring and confirming to W X C or its successors and assigns, or for aiding and assisting in collecting and reducing to possession any of the Subject Properties to be assigned as provided herein.

7.4 On the terms and subject to the conditions herein set forth, W X C will deliver to Wilcox on the Closing Date, definitive stock certificates in the name of Wilcox or its nominees for the account of its stockholders entitled thereto pursuant to this Plan of Reorganization in such denominations as Wilcox shall request for an aggregate of 1,110,776 shares of \$5.00 par value common stock of Tennessee. Promptly after receipt by Wilcox of such stock certificates, it shall distribute or cause to be distributed, all of the shares represented by such certificates to the holders of its common stock in complete winding up and liquidation of Wilcox and will not otherwise dispose of any of such shares. Delivery of such shares shall be made against surrender by the stockholders of Wilcox of their respective Wilcox stock certificates at the rate of 1.6 shares of \$5.00 par value common stock of Tennessee for each issued and outstanding share of Wilcox (exclusive of any shares held by Wilcox in its Treasury), which shares shall be cancelled by Wilcox at or immediately after the Closing Date. Such distribution shall be effected by Tennessee Bank and Trust Company, Houston, Texas, to which Wilcox shall deliver the certificates for the shares of \$5.00 par value common stock of Tennessee received by Wilcox at Closing Date with irrevocable instructions with reference to the distribution thereof. No fractional shares of such Tennessee stock will be issued to the holders of Wilcox stock, but, in lieu thereof, Tennessee Bank and Trust Company, acting as the agent of each stockholder of Wilcox who would otherwise be entitled to a fractional share of Tennessee stock, and in accordance with instructions to be given by such stockholder will (i) sell such stockholder's fractional interest for his account and remit to him the net proceeds, or (ii) purchase for such stockholder's account, a fractional interest to be combined with his fractional interest so as to make a full share of Tennessee common stock and deliver the certificate therefor against payment for the fractional interest purchased. As soon as practicable after the Closing Date, Wilcox will take such steps as may be required under the laws of the State of Delaware to dissolve and terminate its corporate existence except to the extent that under such laws, its corporate exis-

tence may continue for the purpose of settling and winding up its affairs.

7.5 The closing under this Plan of Reorganization shall take place at the offices of Tennessee Gas Transmission Company, Tennessee Building, Houston, Texas, at 10:00 o'clock a.m., on July 21, 1964, or at such other time and at such other place which shall be fixed by mutual consent of the parties hereto. The time and date of such closing is throughout this Plan of Reorganization referred to as the "Closing Date."

ARTICLE 8. *Conditions Precedent to the Exchange by W X C*

8.1 The obligations of W X C to consummate this Plan of Reorganization and to exchange the shares of Tennessee stock for the properties and assets of Wilcox shall be subject to and shall be conditioned upon each of the following conditions:

(i) On or before May 13, 1964, and in accordance with Sections 271 and 275 of the Corporation Law of the State of Delaware, the Board of Directors of Wilcox shall adopt resolutions unanimously recommending the exchange of all of Wilcox's properties and assets for shares of \$5.00 par value common stock of Tennessee as in this Plan of Reorganization set forth, and subject to all of the terms and conditions hereof, and the change of Wilcox's name as soon as practicable after the Closing Date to Lixco Company and directing the submission of such exchange and change of name to a vote at the meeting of the stockholders called for the specific purpose of approval or disapproval of such exchange and change of name and the final dissolution and liquidation of Wilcox.

(ii) A special meeting of the stockholders of Wilcox shall be called for the purposes set forth in subparagraph (i) of paragraph 8.1 above, such meeting to be called and held in accordance with Sections 271 and 275 of the Corporation Law of the State of Delaware no later than July 14, 1964; and the approval of this Plan of Reorganization shall require the affirmative vote of the holders of at least two-thirds of the validly issued and outstanding shares of common stock of Wilcox.

(iii) No properties or assets of Wilcox shall have suffered any destruction or damage by fire, explosion or other calamity exceeding \$25,000 in value not covered by insurance.

(iv) The representations and warranties made by Wilcox in Article 1 hereof shall be correct in all material respects on and as of the Closing Date with the same force and effect (except as affected by the transactions contemplated herein and changes occurring after the date hereof in the ordinary course of business) as though such representations and warranties had been made on and as of the Closing Date; none of the covenants of Wilcox contained in Articles 3, 4 and 5 hereof shall have been breached in any material respect as of the Closing Date, and Wilcox shall have delivered to W X C and Tennessee, a certificate to such effect signed by the President or a Vice President and the Treasurer of Wilcox.

(v) Tennessee and W X C shall have received the certificate of the President or a Vice President and the Treasurer of Wilcox that since the date of the Balance Sheet of Wilcox dated as of March 31, 1964, annexed hereto as a part of Exhibit A, there has been no material adverse change in the condition, financial or otherwise, of Wilcox from that set forth in said Balance Sheet.

(vi) Wilcox shall have delivered to Tennessee and W X C a certificate of Arthur Young & Company addressed to Tennessee and W X C stating that such firm has reviewed the Federal income tax returns of Wilcox for all fiscal years ended after December 31, 1959, and that in the opinion of such firm, such returns properly reflect the Federal income taxes of Wilcox for the years covered thereby, and Wilcox has paid or set up adequate reserves for the payment of all Federal income taxes for such fiscal years and that such firm has no information which indicates to it that the representations of Wilcox in paragraph 1.8 hereof are not true on and as of the Closing Date.

(vii) On or before Closing Date, Wilcox shall have taken such measures as may be appro-

priate to cause to be made freely transferable to the W X C pursuant to this Plan of Reorganization, all contracts listed in or referred to in subparagraph (xi) of paragraph 1.7 hereof.

(viii) The favorable tax ruling to be requested by Wilcox pursuant to Article 10 hereof shall have been received at or prior to the Closing Date.

(ix) At the Closing Date no suit, action or proceeding shall have been instituted by any person or governmental agency in any court or threatened by any governmental agency in which it is sought to restrain or prohibit the consummation of the transactions contemplated by this Plan of Reorganization.

(x) All actions, proceedings, instruments and documents required to carry out this Plan of Reorganization and incident thereto and all other related legal matters shall have been approved in writing by counsel for Tennessee.

(xi) W X C shall have received

(1) The opinion of counsel for Wilcox, dated as of the Closing Date, in form and substance satisfactory to W X C and Tennessee to the effect that

(a) Wilcox is a corporation duly organized and existing and in good standing under the laws of the State of Delaware and is qualified to do business in all states in which it owns property or conducts its business;

(b) except as stated in paragraph 1.8 hereof, such counsel does not know of any material pending litigation to which Wilcox is a party defendant or of any material threatened litigation against Wilcox;

(c) Wilcox has full power and authority to convey, assign, transfer and deliver the Subject Properties and its good will as herein provided;

(d) all corporate and other proceedings required to be taken by Wilcox so as to authorize it to carry out this plan of Reorganization and so to convey, assign, transfer and deliver such properties, assets and good will, have been duly and properly taken;

(e) the vote of the stockholders of Wilcox if taken at the meeting provided for in subparagraph (ii) of paragraph 8.1 hereof and as contemplated therein, will operate to authorize on behalf of Wilcox, the conveyance, transfer, assignment, and delivery of the assets, business, properties and good will of Wilcox in exchange for \$5.00 par value common stock of Tennessee upon the terms and conditions provided herein and to bind all stockholders of Wilcox thereto; and

(2) The opinion of McClure & Trotter, Washington counsel for Wilcox, to the effect that the tax ruling to be requested by Wilcox pursuant to Article 10 hereof is in form and substance satisfactory to Wilcox.

ARTICLE 9. *Conditions Precedent to the Exchange by Wilcox*

9.1 The obligations of Wilcox to consummate this Plan of Reorganization and to exchange its properties, assets and good will for shares of the \$5.00 par value common stock of Tennessee shall be subject to and shall be conditioned upon each of the following conditions:

(i) The holders of at least two-thirds of the outstanding shares of common stock of Wilcox shall have approved the exchange as provided for in subparagraph (ii) of paragraph 8.1 hereof and shall have authorized the change of the corporate name of Wilcox and the complete liquidation and dissolution of the corporation, all as set forth in Article 8 hereof.

(ii) The favorable tax ruling to be requested pursuant to Article 10 hereof shall have been received at or prior to the Closing Date.

(iii) All actions, proceedings, instruments and documents required to carry out this Plan of Reorganization or incident thereto and all other related legal matters shall have been approved by counsel for Wilcox.

(iv) Wilcox shall have received an opinion of counsel for Tennessee, dated as of the Closing Date, in form and substance satisfactory to Wilcox, to the effect that

(1) W X C and Tennessee are each corporations duly organized and existing and in good standing under the laws of the State of Delaware;

(2) all corporate and other proceedings required to be taken by and on the part of W X C to authorize it to enter into and carry out this Plan of Reorganization and to deliver the shares of the common stock of Tennessee deliverable hereunder and as provided herein have been duly and properly taken;

(3) all corporate and other proceedings required to be taken by or on the part of Tennessee to authorize it to enter into this Plan of Reorganization and to carry out its obligations hereunder have been duly and properly taken;

(4) this Plan of Reorganization has been duly executed and delivered by W X C and Tennessee and is a valid and binding obligation of each such corporation enforceable against each of them in accordance with its terms; and

(5) the shares of Tennessee stock delivered to Wilcox pursuant hereto are duly and validly issued and are full paid and nonassessable and W X C has the power and authority to deliver such shares free of any charges, liens or encumbrances to Wilcox as contemplated hereby and that such shares have been duly listed (subject to notice of issuance) on all exchanges upon which the outstanding shares of common stock of Tennessee are listed.

(v) The representations and warranties made by W X C and Tennessee in Article 2 hereof shall be correct in all material respects on and as of the Closing Date with the same force and effect as though said representations had been made on and as of said date and W X C and Tennessee shall each have delivered to Wilcox a certificate to such effect signed by their duly authorized officers.

(vi) All of the terms and conditions of this Plan of Reorganization to be complied with and performed by W X C and Tennessee on or before the Closing Date shall have been complied with and performed.

(vii) The business and properties of Tennessee shall not have been adversely affected in any material way as the result of any fire, accident or other calamity or act of God or the public enemy.

(viii) From and after the date of this Plan of Reorganization to the Closing Date, Tennessee (1) shall not have taken any action which would change in any material respect the nature of its business; (2) shall not have authorized or made any split-up of its common stock or other changes in the rights of the holders of shares of its common stock; and (3) shall not have declared or paid any dividend or made any other distribution to the holders of its common stock in excess of quarterly dividends of 25¢ per share; and on the Closing Date, there shall have been delivered to Wilcox a certificate dated as of the Closing Date, signed by a Vice President and the Secretary or an Assistant Secretary of Tennessee to the foregoing effect.

(ix) At the Closing Date no suit, action or proceeding shall have been instituted by any person or governmental agency in any court or threatened by any governmental agency in which it is sought to restrain or prohibit the consummation of the transactions contemplated by this Plan of Reorganization.

ARTICLE 10. *Request for Tax Ruling*

10.1 Wilcox, W X C and Tennessee believe that the exchange contemplated under this Plan of Reorganization will result in no taxable gain or loss to Wilcox or the stockholders of Wilcox if the securities of Tennessee to be exchanged hereunder are distributed to the stockholders of Wilcox in complete liquidation of Wilcox in accordance with this Plan of Reorganization. Prior to the sub-

mission of this Plan of Reorganization to the stockholders of Wilcox for approval, Wilcox will file an application with the Internal Revenue Service requesting a ruling that no taxable gain or loss will result to Wilcox or its stockholders from the exchange contemplated hereby.

10.2 If, in the opinion of counsel for Wilcox or W X C or Tennessee, the tax ruling obtained is unsatisfactory in form or in substance, the matter in such ruling considered by any such party to be unsatisfactory shall be set forth in a letter to the other parties hereto stating the reasons such matters are considered unsatisfactory, and the receipt by any party of a letter of such nature from any other party shall be an event of termination of this Plan of Reorganization, without liability upon the part of any party hereto to the others.

ARTICLE 11. *Employment Policies*

11.1 W X C and Tennessee agree that, upon termination of employment by Wilcox (and provided Wilcox shall not have paid termination pay upon such terms and in such amounts as agreed upon by Wilcox, W X C and Tennessee), each officer and employee of Wilcox will be offered employment (in the same or similar capacity as practicable) by W X C, Tennessee, or one of Tennessee's other subsidiary or affiliate companies, provided that such officer or employee (i) is performing duties for Wilcox of the same or similar nature presently being performed by officers or employees of Tennessee, or one of its subsidiary or affiliate companies, (ii) can qualify for employment with W X C, Tennessee, or one of Tennessee's other subsidiary or affiliate companies, pursuant to existing employment practices and policies of such companies and/or (iii) is not offered employment by a contractor of Tennessee, or by a contractor of one of Tennessee's subsidiary or affiliate companies. With respect to any officer or employee of Wilcox who is employed by W X C, Tennessee or one of Tennessee's other subsidiary or affiliate companies, it is the intention of W X C and Tennessee to continue in effect (until such officer or employee becomes eligible for participation in the employee benefit plans of Tennessee, or its other said subsidiary or affiliate companies) the same or similar pension, retirement, hospitalization and other employee plans and benefits as have been heretofore in effect by Wilcox utilizing as appropriate the seniority and employment records as a basis for the rights of such officer or employee under such plans and benefit programs.

ARTICLE 12. *Gas Sales Contracts*

12.1 On the date of execution of this Plan of Reorganization, Wilcox has furnished W X C and Tennessee with a complete list of the interstate gas sales from which Wilcox receives revenues which may be subject to partial refund with interest under orders of the Federal Power Commission and the amounts of such revenues arising from such sales which may be refundable to third parties. It is contemplated that W X C and Tennessee will immediately institute an investigation of the certificates and orders of the Federal Power Commission pertaining to such sales in interstate commerce of gas produced and sold by Wilcox and the amounts which are conditionally subject to refund thereunder. If, in the opinion of W X C and/or Tennessee, the amounts so subject to refund are substantially greater than the amounts represented by Wilcox as being subject to refund, then W X C and/or Tennessee may, at the election of either of them, set forth in a letter to Wilcox the results of their investigation and the facts upon which either of them has concluded that the contingent liability for refund of Wilcox is greater than that as represented by Wilcox, and the receipt by Wilcox of such a letter prior to the Closing Date shall be an event of termination of this Plan of Reorganization without liability upon the part of W X C or Tennessee to Wilcox.

ARTICLE 13. *Registration Matters*

13.1 W X C shall not be obligated to transfer the shares of the common stock of Tennessee pursuant to this Plan of Reorganization until Tennessee shall have received from its counsel an opinion that registration of such stock, or any part thereof, is not required under the Securities Act of 1933, as amended. It is understood that any such opinion of counsel to the effect that no regis-

tration of such stock, or any part thereof, under said Act is required is dependent upon, among other things, a determination of whether any person or persons may be deemed to be an affiliate of Wilcox within the meaning of the Securities Act of 1933, as amended, or whether there can be obtained from such person or persons written representations satisfactory in form and substance to such counsel as to the intentions of such person or persons with respect to the shares of Tennessee stock to be received by them. Such representations from any such person or persons must be to the effect that the shares of Tennessee stock received by them upon the dissolution of Wilcox will not be sold or distributed by them except as permitted by paragraphs (d) and (e) of Rule 133 of the Rules and Regulations of the Securities and Exchange Commission under the Securities Act of 1933, as amended. Upon request of W X C or Tennessee, Wilcox will use its best efforts to secure the written representations referred to in this Article 13.

ARTICLE 14. *Termination of Plan of Reorganization*

14.1 Wilcox, Tennessee and W X C each agrees to use its best efforts to bring about the satisfaction of all the conditions cast upon them respectively by virtue of the terms and provisions of this Plan of Reorganization; but if any condition specified herein is not satisfied and such condition is not waived by the party or parties for the benefit of which such condition is stated, such party may terminate this Plan of Reorganization by notice in writing to the other parties. In the event of such termination, this Plan of Reorganization shall cease and terminate and no party hereto shall have any liability hereunder of any nature whatsoever to any other party hereto except in respect of obligations theretofore to be performed.

ARTICLE 15. *Confidential Treatment of Wilcox Information*

15.1 W X C and Tennessee covenant that in the event the transactions contemplated by this Plan of Reorganization shall not be consummated, they will keep and maintain in strict confidence all information concerning the properties, business, activities, assets and good will of Wilcox obtained by W X C and/or Tennessee from Wilcox in the course of the examination of the affairs of Wilcox pursuant to the provisions of this Plan of Reorganization.

ARTICLE 16. *Assignment and Amendment of the Plan of Reorganization*

16.1 This Plan of Reorganization shall not be assignable by any of the parties hereto except with the written consent of the other parties hereto. This Plan of Reorganization may be amended by written agreement by all of the parties hereto and any such amendment may

(i) change the time for performance of any of the obligations or actions of the parties hereto including changes of the time and place of the closing;

(ii) waive any inaccuracy in or modify the representations contained herein or in any exhibits hereto; and/or

(iii) waive compliance with or modify any of the covenants herein contained and waive or modify performance of any of the obligations of the parties hereto; provided, however, that no modification shall be made which will affect the number of shares of \$5.00 par value common stock of Tennessee deliverable for each share of the common stock of Wilcox on liquidation of Wilcox, or which would cause any liability of Wilcox to be outstanding at and after the Closing Date and not assumed by W X C.

ARTICLE 17. *Notices*

17.1 Any notice or communication given pursuant hereto by any party to any other party hereto shall be in writing or delivered or mailed by registered mail, postage prepaid, as follows:

If to Wilcox:

Alvin L. Chapman, President
Wilcox Oil Company
P. O. Box 1440
Tulsa, Oklahoma

If to W X C or Tennessee:

R. E. McGee, Senior Vice President
Tennessee Gas Transmission Company
P. O. Box 2511
Houston 1, Texas

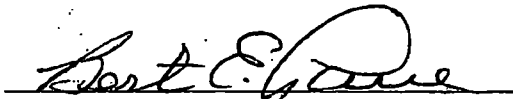
or at such other address as hereinafter shall be furnished in writing by any party hereto to the other parties.

ARTICLE 18. *Miscellaneous*


18.1 This Plan of Reorganization supersedes that certain Letter Agreement dated April 13, 1964, by and between Tennessee Gas Transmission Company and Wilcox Oil Company.

IN WITNESS WHEREOF, the parties hereto have executed this Plan of Reorganization, in multiple counterparts, each of which shall be deemed to be but one and the same instrument upon the day and year first above written.

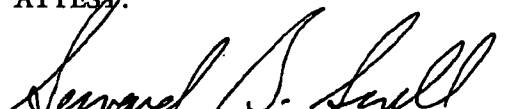
ATTEST:


Secretary

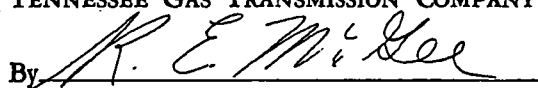
WILCOX OIL COMPANY

By 
President
(Wilcox)

ATTEST:


Assistant Secretary

TENNESSEE GAS TRANSMISSION COMPANY

By 
Senior Vice President
(Tennessee)

ATTEST:


Assistant Secretary

W X C COMPANY


By 
Vice President
(W X C)

EXHIBIT A

ARTHUR YOUNG & COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

U.S.A., CANADA, MEXICO, SOUTH AMERICA
GREAT BRITAIN, CONTINENTAL EUROPE
MIDDLE EAST, SOUTH AFRICA, AUSTRALIA

1500 FIRST NATIONAL BUILDING
TULSA

The Board of Directors and Stockholders,
Wilcox Oil Company:

We have examined the accompanying balance sheet of Wilcox Oil Company at December 31, 1963 and the related statement of income and retained earnings for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the statements mentioned above present fairly the financial position of Wilcox Oil Company at December 31, 1963 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR YOUNG & COMPANY

January 24, 1964

WILCOX OIL COMPANY
BALANCE SHEET
December 31, 1963 and 1962

ASSETS

	<u>1963</u>	<u>1962</u>
Current assets:		
Cash, including \$1,850,000 certificates of deposit (\$1,750,000 in 1962)	\$ 2,308,109	\$ 2,279,928
Accounts receivable	473,495	565,313
Secured note receivable, current installments	100,000	—
Crude oil, at lower of cost, computed on first-in, first-out basis, or market	28,809	28,294
Materials and supplies, at or below cost	154,428	201,977
Total current assets	3,064,841	3,075,512
 Fixed assets, at cost:		
Undeveloped leases and mineral rights	496,968	528,566
Developed leases and mineral rights	9,908,620	9,149,686
Well and lease equipment	10,973,386	10,035,957
Other facilities	1,655,710	2,186,321
	23,034,684	21,900,530
Less accumulated depreciation and depletion	12,853,559	12,026,070
	10,181,125	9,874,460
 Other assets:		
Secured note receivable, installments due after one year	383,333	—
Deferred charges	114,644	12,922
	497,977	12,922
	<u>\$13,743,943</u>	<u>\$12,962,894</u>

EXHIBIT A—Page 1

WILCOX OIL COMPANY

BALANCE SHEET

December 31, 1963 and 1962

LIABILITIES AND STOCKHOLDERS' EQUITY

	<u>1963</u>	<u>1962</u>
Current liabilities:		
Accounts payable.....	\$ 189,618	\$ 272,898
Accrued liabilities.....	27,387	60,831
Dividend payable.....	104,135	101,595
Total current liabilities.....	321,140	435,324
 Stockholders' equity:		
Common stock, par value \$5; 1,200,000 shares authorized, 1,035,806 shares issued, less 341,571-2/5 shares in treasury (358,504-2/5 in 1962).....	3,471,173	3,386,508
Capital in excess of par value.....	905,897	536,505
Retained earnings.....	9,045,733	8,604,557
	13,422,803	12,527,570
	<u>\$13,743,943</u>	<u>\$12,962,894</u>

EXHIBIT A—Page 1

WILCOX OIL COMPANY

STATEMENT OF INCOME AND RETAINED EARNINGS

Years ended December 31, 1963 and 1962

	1963	1962
Revenues:		
Crude oil and natural gas sales.....	\$ 4,533,956	\$4,466,137
Refined products sales.....	—	1,080,893*
Miscellaneous.....	132,418	112,925
	<u>4,666,374</u>	<u>5,659,955</u>
Cost of operations:		
Production, operating and general expenses.....	1,641,704	1,763,993
Refined products purchases.....	—	984,112
Depreciation, depletion and amortization.....	1,028,045	997,613
Canceled leases, dry holes and abandonments.....	341,318	375,904
Oil and gas lease rentals.....	69,001	95,730
Taxes.....	309,389	306,322*
	<u>3,389,457</u>	<u>4,523,674</u>
Income from operations.....	1,276,917	1,136,281
Gain on sale of refinery, marketing and related facilities.....	142,803	86,352
Net income.....	<u>1,419,720</u>	<u>1,222,633</u>
Retained earnings:		
Balance at beginning of year.....	8,604,557	8,366,489
	<u>10,024,277</u>	<u>9,589,122</u>
Dividends declared:		
Cash — 75¢ per share.....	517,979	503,020
Stock — 2½%.....	460,565	481,545
	<u>978,544</u>	<u>984,565</u>
Balance at end of year.....	<u>\$ 9,045,733</u>	<u>\$8,604,557</u>

*Restated to exclude excise taxes of \$369,342.

EXHIBIT A — Page 2

WILCOX OIL COMPANY
NOTES TO FINANCIAL STATEMENTS

December 31, 1963

- Note 1: In 1963 the Company sold its idle refinery, storage and related facilities receiving in consideration therefor a \$500,000, 6% mortgage note receivable due in equal monthly installments over a five-year period.
- Note 2: Under the Company's stock option plan for certain officers and other key employees, options for 39,102 shares may be granted, exercisable over a ten-year period, at not less than 95% of market price on the date of grant. Prior to 1963 options for 23,055 shares had been granted and exercised leaving 16,047 shares available at December 31, 1963 for granting of options under the plan.
- Note 3: During 1963 capital in excess of par value was increased by \$369,392 representing the excess (less issue expenses) of approximate market value over the par value of 16,933 shares issued as a result of a 2½% stock dividend.
- Note 4: The excess of depletion and intangible development costs claimed for federal income tax purposes over the corresponding amounts taken on the books together with the carry forward of the remaining prior years tax deductions is slightly in excess of taxable income otherwise determinable. Therefore no provision for federal income taxes is considered necessary.
- Note 5: The Company is involved in certain litigation in connection with its normal operations. It is not anticipated that settlement thereof will have a material effect on the accompanying financial statements.

EXHIBIT A — Page 3

WILCOX OIL COMPANY

BALANCE SHEET

March 31

ASSETS

	1964	1963
Current Assets:		
Cash.....	\$ 777,771.51	\$ 562,362.00
Certificates of deposit.....	1,850,000.00	1,750,000.00
Notes and accounts receivable.....	607,386.47	481,017.21
Inventories — Crude oil.....	28,809.24	28,294.14
Material and supplies.....	168,810.89	196,510.93
Total current assets.....	3,432,778.11	3,018,184.28
Fixed Assets:		
Undeveloped leases and mineral rights.....	499,863.34	505,623.80
Developed leases and mineral rights.....	9,901,035.41	9,355,261.34
Well and lease equipment.....	11,007,232.40	10,272,199.21
Other facilities.....	1,675,702.65	2,102,552.97
	23,083,833.80	22,235,637.32
Less accumulated depreciation and depletion.....	12,991,165.16	12,236,195.47
	10,092,668.64	9,999,441.85
Other Assets and Deferred Charges:		
Notes receivable, not current.....	375,000.00	
Prepaid and deferred charges.....	127,144.51	114,917.25
	502,144.51	114,917.25
	<u>\$14,027,591.26</u>	<u>\$13,132,543.38</u>

EXHIBIT A — Page 4

WILCOX OIL COMPANY

BALANCE SHEET

March 31

LIABILITIES AND STOCKHOLDERS' EQUITY

	<u>1964</u>	<u>1963</u>
Current Liabilities:		
Accounts payable.....	\$ 159,989.18	\$ 220,290.95
Accrued liabilities.....	67,112.74	73,251.53
Total current liabilities.....	227,101.92	293,542.48
 Reserve for Contingencies:.....	 25,000.00	
 Stockholders' Equity:		
Common stock		
Authorized — 1,200,000 shares, par value \$5.00.....		
Issued 1,035,806 shares.....	5,179,030.00	5,179,030.00
Less: In treasury — 341,571-2/5 shares		
in 1964, 358,504-2/5 in 1963.....	1,707,857.00	1,792,522.00
Outstanding 694,234-3/5 shares in 1964,		
677,301-3/5 shares in 1964,.....	3,471,173.00	3,386,508.00
Capital in excess of par value,		
per accompanying statement.....	905,897.09	536,505.09
Retained earnings per accompanying statement.....	9,398,419.25	8,915,987.81
	<u>13,775,489.34</u>	<u>12,839,000.90</u>
	 <u>\$14,027,591.26</u>	 <u>\$13,132,543.38</u>

EXHIBIT A — Page 4

WILCOX OIL COMPANY
STATEMENT OF RETAINED EARNINGS AND
CAPITAL IN EXCESS OF PAR VALUE

March 31

	<u>YEAR TO DATE</u>	
	<u>1964</u>	<u>1963</u>
Retained Earnings:		
Balance at beginning of year.....	\$ 9,045,732.58	\$ 8,604,556.23
Net income.....	352,686.67	311,431.55
	<u>\$ 9,398,419.25</u>	<u>\$ 8,915,987.78</u>
 <i>Charges</i>		
Dividends declared:		
Cash.....		(.03)
Balance March 31.....	<u>\$ 9,398,419.25</u>	<u>\$ 8,915,987.81</u>
 Capital in Excess of Par Value:		
Balance at beginning of year.....	\$ 905,897.09	\$ 536,505.09
	<u>\$ 905,897.09</u>	<u>\$ 536,505.09</u>

EXHIBIT A—Page 5

WILCOX OIL COMPANY
STATEMENT OF INCOME AND EXPENSES

March 31

	1964		1963
	Month of March	Year to Date	Year to Date
Revenue:			
Product sales.....	\$ 380,028.37	\$1,135,512.27	\$1,110,734.95
Royalty.....	6,843.45	20,922.80	22,090.90
Total.....	386,871.82	1,156,435.07	1,132,825.85
Costs:			
Purchases.....	1,915.02	7,987.41	11,872.14
Gross production tax.....	15,937.26	46,620.18	44,163.94
Total.....	17,852.28	54,607.59	56,036.08
Gross income.....	369,019.54	1,101,827.48	1,076,789.77
Operating Expense:			
Direct.....	104,847.89	310,352.62	321,465.01
Taxes.....	11,730.61	34,655.26	35,265.47
Depreciation, depletion and amortization.....	96,976.55	280,042.85	292,515.37
Total.....	213,555.05	625,050.73	649,245.85
Operating income.....	155,464.49	476,776.75	427,543.92
Non-Operating Income and Deductions:			
Miscellaneous income.....	10,123.84	32,894.56	24,215.23
Gain on sale of capital assets.....	6,108.72	6,203.72	11,502.70
Net.....	16,232.56	39,098.28	35,717.93
	171,697.05	515,875.03	463,261.85
Management Controlled Items:			
General and administrative.....	23,259.57	72,977.79	72,255.68
Land and geological.....	8,569.64	21,149.79	10,825.39
Dry hole costs and contributions.....	79.66	3,546.72	23,890.75
Undeveloped lease rentals.....	6,116.35	29,612.28	20,918.52
Undeveloped leases cancelled.....	2,509.62	9,598.13	24,025.48
Abandonment of capital assets.....	2.34	1,303.65	(85.52)
Provision for contingencies.....		25,000.00	
Total.....	40,537.18	163,188.36	151,830.30
Net income.....	\$ 131,159.87	\$ 352,686.67	\$ 311,431.55

EXHIBIT A—Page 6

EXHIBIT B

LIABILITIES OF WILCOX SUBSEQUENT TO MARCH 31, 1964

Except as listed below, Wilcox has no liabilities, absolute or contingent, known to officers and directors of Wilcox which are not shown or provided for on the unaudited Balance Sheet of Wilcox as of March 31, 1964, annexed as part of Exhibit A:

Contingent Liability

Aetna Life Insurance Company Employee Group Annuity Contract No-426, dated June 1, 1949, single premium for the remaining past service benefits, as provided in endorsement No. 7, of the contract, dated June 1, 1963..... \$ 33,919

Authorization for Expenditures

To replace portion of salt water disposal system on the Sac & Fox Prue Sand Unit, in Lincoln County, Oklahoma. Wilcox 77.4054908% interest 14,708

To purchase and install four 228,000 in-lb pumping units and one 70 H.P. submersible pump on the Southwest Mt. Vernon Skinner Sand Unit, in Lincoln County, Oklahoma. Wilcox 7.0938% interest 3,309

Material on Order

Casing, tubing linepipe, sucker rods and fittings.....	\$ 27,301	
Tanks and treators	1,525	
Pumping units and engines.....	16,853	45,679

Estimated Drilling Costs

Wells drilling and to be drilled.....	183,150	
Outstanding on completed wells.....	80,000	263,150
Total		<u>\$360,765</u>

Other Unrecorded Liabilities

Consisting of the customary monthly lag of liabilities incurred in the ordinary course of business.

Labor Union Contracts

- (1) Oil, Chemical and Atomic Workers International Union C.I.O. Local 5-280, Drumright, Oklahoma.
 - (a) Term January 1, 1945 to December 31, 1945, and thereafter unless terminated by either party on 30 days written notice by the party electing to terminate.
- (2) International Union of Operating Engineers Local 351 affiliated with A.F. of L., Borger, Texas.
 - (a) Term September 4, 1946 to September 3, 1947, and thereafter unless terminated by either party on 30 days written notice by the party electing to terminate.

EXHIBIT C-1

PRODUCING PROPERTIES UNDER THAT CERTAIN PLAN OF REORGANIZATION DATED MAY 13, 1964, BY AND BETWEEN WILCOX OIL COMPANY, TENNESSEE GAS TRANSMISSION COMPANY AND W X C COMPANY.

PRODUCING LEASES ALFALFA COUNTY, OKLAHOMA

- 5589 Elmer Landreth
An undivided $\frac{1}{4}$ interest in Oil and Gas Lease dated October 8, 1951, from Elmer A. Landreth, et al, Lessor, to Carl E. Gungoll, Lessee, recorded in Book 108, page 349, covering the following described land:
160.00 acres being SE/4 Section 12-28N-9W
- 5145 Carl Morawitz
An undivided $\frac{1}{4}$ interest in Oil and Gas lease dated July 3, 1952, from Carl B. Morawitz, et ux, Lessor to Joe Harp, Lessee, recorded in Book 108, page 617, covering the following described land:
160.00 acres being NE/4 Section 12-28N-9W
- Each of the above leases provide for a $\frac{1}{8}$ royalty and each lease is subject to:
1. Operating Agreement dated February 3, 1955, between Wilcox Oil Company, et al, designating Viersen and Cochran as Operator.
- Wilcox Oil Company's Net Revenue Interest in Each Lease is 21.875%

PRODUCING MINERALS ALFALFA COUNTY, OKLAHOMA

- 1721 Andrew Wedel Royalty
An undivided $\frac{1}{2}$ interest in all the oil, gas and other minerals in and under:
Being 160 acres, more or less, SW/4 of Section 9-23N-9W I.M.
- Said interest is subject to:
1. Oil and Gas lease dated July 8, 1961 from Wilcox Oil Company to Aladdin Petroleum Company, recorded in Book _____, page _____ of the records of Alfalfa County, Oklahoma which lease provides for a $\frac{1}{8}$ royalty.
- Wilcox Net interest in production .062500 R.I.

PRODUCING LEASES BEAVER COUNTY, OKLAHOMA

- 4757 Blanche Ausmus
The following interest in Oil and Gas lease dated January 16, 1951, from H. A. Ausmus, et ux, Lessor, to Wilcox Oil Company, Lessee, recorded in Book 31 OG, page 570, covering the following described land:
An undivided $\frac{1}{2}$ interest in 160.00 acres being SW/4 Section 28-6N-22E CM and a full interest in 160.00 acres being NW/4 Section 33-6N-22E CM
- Said lease provides for a $\frac{1}{8}$ royalty and SW/4 Section 28 is subject to Operating Agreement dated December 18, 1959, between Apache Oil Corporation, Operator, and Wilcox Oil Company, et al, covering operations for the "Blucher Unit" in which Wilcox Oil Company has a 12.50% Working Interest and a 10.9375% Net Revenue Interest.

PRODUCING MINERALS BEAVER COUNTY, OKLAHOMA

- 2860 Edward Frantz #1
An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160 acres being SW/4 Section 2-2N-21E
- 2861 Edward Frantz #2
An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160 acres being NW/4 Section 2-2N-21E
- The above two (2) interest being subject to Operating Agreement dated May 20, 1958, between Union Oil Company of California, Operator, and Wilcox Oil Company, et al, covering operations for the "Frantz "A" Unit," in which Wilcox Oil Company's working interest and net revenue interest are both 25.00%

EXHIBIT C-1 — Page 1

**PRODUCING LEASES
BECKHAM COUNTY, OKLAHOMA**

1985 O. H. Eggleston

Oil and Gas Lease dated March 23, 1945, from D. R. Grable, Lessor, to Carl S. Ford, Lessee, recorded in Book 52 mcl, page 498

Oil and Gas lease dated March 29, 1945, from M. V. Mills, Lessor, to Robert E. Clark, Lessee, recorded in Book 52 mcl, page 512

Oil and Gas lease dated March 16, 1945, from Cleo Walter, et ux, Lessor, to D. E. Wyatt, lessee, recorded in Book 52 mcl, page 434

Oil and Gas lease dated March 21, 1945, from J. R. McGinley, Lessor, to Carl S. Ford, Lessee, recorded in Book 52 mcl, page 492

Said leases collectively covering $\frac{1}{2}$ interest in the following described land:
160 acres being NW/4 Section 24-10N-21W

Leases provide for $\frac{1}{4}$ royalty and all subject to "Elk City Hoxbar Sand Conglomerate Unit" — See remarks under Producing Minerals — File 1985.

5417 Joe Reel

Oil and Gas lease dated February 1, 1954, from Joe Reel, et ux, Lessor, to J. W. Darnell, Lessee, recorded in Book 118 of mcl, page 312, covering an undivided $\frac{1}{4}$ interest in
160 acres being S/2 NW/4, N/2 SW/4 Section 15-9N-22W

Lease provides for a $\frac{1}{4}$ royalty and is subject to Operating Agreement dated December 7, 1956, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering SE/4 Section 8, S/2 Section 9, S/2 Section 10, E/2 Section 17, all Section 16, All Section 15, NE/4 Section 20, N/2 Section 21, N/2 Section 22-9N-22W, which "pools" all Working Interest and in which Wilcox Oil Company has an 800/3180 Interest. All interest and contract rights which Wilcox Oil Company owns in the lands covered by said Operating Agreement, and which were created by virtue of said Operating Agreement, are included herein. Operating Designations within the Area covered by said Operating Agreement are:

- 6161 1. Missouri Formation underlying N/2 Section 16-9N-22W unitized by Oklahoma Corporation Commission Order 45585 (C.D. 15036), Operated as Shell Oil Company — Armbruster (Missouri) lease.
- 6161 2. Springer Formation underlying SW/4 Section 10, NW/4 Section 15-19N-22W unitized by Oklahoma Corporation Commission Order 45586 (C.D. 15037), Operated as Shell Oil Company — C. Boyd (Springer) lease.
- 6162 3. Des Moines "A", Des Moines "B"-1, Des Moines "C" and Missouri Formations unitized by Oklahoma Corporation Commission Orders 45585 (C.D. 15036), 42347 (C.D. 13119) and 49688 (C.D. 13119), Operated as Shell Oil Company — Shadid Patten Unit, covering S/2 Section 9-9N-22W.
- 6164 4. Oil and Casinghead Gas underlying SW/4 Section 9-9N-22W, operated as Shell Oil Company—F. Shadid lease.
- 6286 5. *Missouri Formation underlying E/2 Section 8-9N-22W, unitized by Oklahoma Corporation Commission Order No. 45585 (C. D. 15036), Operated as Shell Oil Company — Whitledge (Missouri) Unit in which Wilcox owns 12.57862% of 7/8 Interest.
- 6. *Des Moines "A" Formation underlying E/2 Section 8-9N-22W unitized by Oklahoma Corporation Commission Order No. 42347 (C. D. 13119), Operated as Shell Oil Company — Whitledge (Des Moines "A") Unit in which Wilcox owns 12.57862% of 7/8 Interest.

*Operating Agreement dated December 7, 1956, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, terminated as to SE/4 Section 8-9N-22W, and parties to said Agreement entered into a new Operating Agreement dated November 16, 1960, covering E/2 Sec. 8-9N-22W, operated as "Whitledge" unit.

5624 School Land #52

Oil and Gas lease dated July 18, 1955, from The State of Oklahoma (Lease No. OSEI-778), Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 129 mcl, page 111, covering all interest in

80 acres being S/2 NW/4 Section 8-9N-22W

Lease provides for a $\frac{1}{4}$ royalty.

EXHIBIT C-1 — Page 2

5625 School Land #53

Oil and Gas lease dated July 18, 1955, from The State of Oklahoma (Lease No. OSEI-779), Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 129 mcl, page 108, covering all interest in 80 acres being N/2 SW/4 Section 8-9N-22W
Lease provides for $\frac{1}{4}$ royalty.

5625-A Oliver Duggins

Oil and Gas lease dated August 12, 1953, from Oliver J. Duggins, et ux, Lessor, to H. G. Truitt, Lessee, recorded in Book 114 mcl, page 854, covering all interest in

80 acres being S/2 SW/4 Section 8-9N-22W
from the surface of the earth down to and including the depth of 9,292 feet.

Lease provides for a $\frac{1}{4}$ royalty and is further subject to a $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty on oil and oil well (casinghead) gas and a $\frac{1}{8}$ of $\frac{7}{8}$ overriding royalty on all gas well gas and all other hydrocarbons. Lease No. 5624, 5625 and 5625-A being subject to State of Oklahoma Corporation Commission Order No. 42347 which unitized production of oil and gas from Zone A of the Des Moines granite wash formation and Order No. 45585 which unitized oil and gas from Missouri (Hoxbar) formation under W/2 Section 8-9N-22W, Operated as "Duggins Unit," in which Wilcox Oil Company has net revenue interest of $\frac{47}{64}$ of $\frac{7}{8}$ W. I. on oil and $\frac{23}{32}$ of $\frac{7}{8}$ W. I. on gas.

5416 Elmer Cruze

Oil and Gas lease dated February 4, 1954, from Elmer T. Cruze, et ux, Lessor, to J. E. Shaw, Lessee, recorded in Book 118 mcl, page 483, covering an undivided $\frac{1}{4}$ interest in

320 acres being S/2 SE/4 Section 4, E/2 NE/4 Section 9, NW/4 Section 10-9N-22W

Lease provides for $\frac{1}{4}$ royalty and is subject to Operating Agreement dated January 8, 1962, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering N/2 Section 9-9N-22W, which "pools" all Working Interest, and in which Wilcox Oil Company has an 18.75% interest. All interest and Contract rights which Wilcox Oil Company owns in the lands covered by said Operating Agreement and which were created by virtue of said Agreement are included herein. Operating Designations within the Area covered by said Operating Agreement are:

- 5416-A
1. Missouri Formation, Des Moines "A" Formation and Des Moines "B"-1 Formation underlying N/2 Section 9-9N-22W unitized by Oklahoma Corporation Commission Orders 45585 (C.D. 15036), 47347 (C. D. 13119) and 49688 (C. D. 13119), Operated as Shell Oil Company — Cruze Cooper Unit in which Wilcox Oil Company has 18.75% of $\frac{7}{8}$ Interest.
 2. E/2 NW/4, W/2 NE/4 Section 9-9N-22W operated as Shell Oil Company — W. D. Cruze lease in which Wilcox Oil Company has 18.75% of $\frac{7}{8}$ Interest.

**PRODUCING MINERALS
BECKHAM COUNTY, OKLAHOMA**

1985 O. H. Eggleston

An undivided $\frac{1}{2}$ interest in all the oil, gas and other minerals in and under

320 acres being NW/4 Section 24, SE4/ SE/4 Section 14, E/2 NE/4, NE/4 SE/4 Section 23-10N-21W

Lands in Section 14 and 23 being subject to oil and gas lease dated September 5, 1946, from Wilcox Oil Company, Lessor to Shell Oil Company, Lessee, recorded in Book 55, page 378.

All land being subject to "Elk City" Hoxbar Sand Conglomerate Unit", approved by the Corporation Commission of the State of Oklahoma, October 27, 1950, in Cause C. D. No. 2846, Order 24158, as subsequently enlarged, and under which the participating factor for this acreage is .034500595.

**PRODUCING MINERALS
CARTER COUNTY, OKLAHOMA**

2574 H. L. Berry

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
SW/4 SW/4 SE/4 Section 5-3S-2W

Subject to Oil and Gas lease dated January 10, 1924, from Mrs. H. L. Berry, et ux, as Lessor, to Edward Galt, as Lessee, recorded in Book 70, Page 116, providing for $\frac{1}{4}$ royalty.

2575 Cubby F. Dillard

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
E/2 NW/4 NW/4; W/2 NE/4 NW/4 Section 22-4S-2W

Subject to Oil and Gas Lease dated September 20, 1916, from J. H. Dillard, et ux, as Lessor, to Frank L. Ketch, as Lessee, recorded in Book 30, Page 38, providing for $\frac{1}{4}$ royalty.

EXHIBIT C-1 — Page 3

**PRODUCING MINERALS
CLEVELAND COUNTY, OKLAHOMA**

1632 Geo. S. Linscott

An undivided 1/16 interest in and to the oil, gas and other minerals in and under NE/4 Section 22; N/2 and E/2 SE/4 and beginning at the NE/c of SW/4 Section 23, thence S. 103 3/11 rods, thence West 62 rods, thence N. 103 3/11 rods, thence East 62 rods to place of beginning and beginning at NW/c SE/4 Section 23, thence S. 66 rods, thence East 80 rods, thence N. 66 rods, thence West 80 rods to place of beginning; S/2 NW/4 Section 24-8N-2W

Subject to Operating Agreement dated March 23, 1957, between The Pure Oil Company, as Operator, and Wilcox Oil Company, as Non-Operator, and covering W/2 NW/4 Section 23-8N-2W, in which Wilcox Oil Company owns 6.25%.

Net interest in production is 6.2500%.

**PRODUCING LEASES
CREEK COUNTY, OKLAHOMA**

75-A Janie Heneha

All interest in and to Oil and Gas lease dated March 2, 1920 from Albert Kelley, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 396, insofar as said lease covers:
NE/4 Section 2-15N-8E

75-B Vivian Miles

All interest in and to Oil and Gas lease dated March 2, 1920, from Albert Kelley, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 396, insofar as said lease covers:
SE/4 NW/4, S/2 NE/4 NW/4 Section 2-15N-8E

Each of the above leases provide for a 1/8th Royalty Interest.
Net interest in production is .875000.

91 Melene Harjo

All interest in and to Oil and Gas lease dated January 7, 1919, from The Board of County Commissioners of Creek County, as Lessor, to Albert Kelley, as Lessee, recorded in Book 171, Page 280, insofar as said lease covers:
S/2 SW/4 Section 35-16N-8E; N/2 NE/4 NW/4 Section 2-15N-8E

Said lease provides for a 1/8 Royalty.

Net interest in production is .875000.

52 Eddie Barnett

All interest in and to Oil and Gas lease dated October 25, 1919, from Wash Sanders, Gdn., as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 71, covering:
SW/4 SW/4, S/2 NW/4 SW/4 Section 25-16N-9E

Said lease provides for a 1/8 Royalty.

Net interest in production is 87.5000%.

181 Lucy Barnett

All interest in and to Oil and Gas lease dated December 22, 1919, from George R. McConnell, et al, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 215, covering:
N/2 NW/4, SW/4 NW/4, Section 25-16N-9E

Said lease provides for 1/8 Royalty.

Net interest in production is 87.5000%.

456 Tullemarsey Scott

All interest in and to Oil and Gas lease dated October 21, 1922, from C. C. Kimble, et al, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 273, Page 315, covering:
S/2 NE/4, N/2 N/2 NE/4 NE/4, W/2 NW/4 NE/4, SE/4 NW/4 NE/4, S/2 NE/4 NE/4, S/2 N/2 NE/4 NE/4, E/2 NE/4 NW/4 SE/4, W/2 NW/4 NE/4 SE/4 Section 20-14N-10E

Said lease provides for a 1/8 Royalty.

Net interest in production is 87.5000%.

EXHIBIT C-1 — Page 4

- 31 Willie Stepney
All interest in and to Oil and Gas lease dated August 30, 1918, from Mary Nash, et al, as Lessor, to H. F. Maddox, as Lessee, recorded in Book 171, Page 253, covering:
SW/4, less 17.78 acres in NE/4 SW/4 Section 24-15N-10E

Said lease provides for $\frac{1}{8}$ Royalty.
Net interest in production is 87.5000%.
- 3109 Alice Deere
Oil and Gas lease dated May 11, 1939, from J. W. Adams, as Lessor, to F. D. Williams, as Lessee, recorded in Book 455, Page 212, covering:
Full interest in SW/4 NE/4 Section 34-14N-7E; An undivided $\frac{1}{4}$ interest in SE/4 NE/4 Section 34-14N-7E.

Said lease provides for a $\frac{1}{8}$ Royalty subject to:
Operating Agreement dated February 1, 1956, between Wilcox Oil Company, as Operator, and Sunray Mid-Continent Oil Company, et al as non-Operator, covering SE/4 NE/4, Section 34-14N-7E, in which Wilcox Oil Company owns a 25.0000% W. I.

Net interest in production is 5.46875%.
- 3423 Liley Stepney
An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated March 15, 1940, from J. B. Castle, et al, as Lessor, to Bryan Petroleum Company, as Lessee, recorded in Book 458, Page 208, covering:
SW/4 Section 35-14N-7E

Said lease provides for a $\frac{1}{8}$ Royalty subject to:
Operating Agreement dated February 1, 1956, between Wilcox Oil Company, as Operator, and Bryan Interests, Inc., et al, as non-Operator, covering SW/4 Section 35-14N-7E, in which Wilcox Oil Company owns a 50% W. I.

Net interest in production is 43.7500%.
- 3401 S. Stepney "B" (Community)
An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 18, 1939, from J. W. Adams, et ux, as Lessor, to Fred Phillips, as Lessee, recorded in Book 455, Page 298, covering:
E/2 SW/4 Section 26; W/2 NW/4 Section 35-14N-7E

Said lease provides for a $\frac{1}{8}$ Royalty subject to:
Operating Agreement dated February 1, 1956, between Wilcox Oil Company, as Operator, and Sunray Mid-Continent Oil Company, et al, as non-Operator, covering W/2 NW/4, less NW/4 SW/4 NW/4, Section 35-14N-7E, in which Wilcox Oil Company owns a 25.000% W.I.

Net interest in production is 21.8750%.
- 5463 Wagner Bogy
An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated June 19, 1954, from Glenn A. Young, as Lessor, to Pearl B. Jackson, as Lessee, recorded in Book 710, Page 525, covering:
E/2 SE/4 Section 22-18N-10E

Lease provides for a $\frac{1}{8}$ Royalty subject to:
1. An overriding royalty of 1/16 of 7/8.
2. Operating Agreement dated September 1, 1954, between Wilcox Oil Company, as Operator, and Pearl B. Jackson, as non-Operator, covering E/2 SE/4 Section 22-18N-10E, in which Wilcox Oil Company owns a 50.0000% W.I.

Net interest in production is 41.01562%.
- 5478 Sissie Stepney "C"
All interest in and to Oil and Gas lease dated October 18, 1939, from J. W. Adams, et ux, as Lessor, to Fred Phillips, as Lessee, recorded in Book 455, Page 298, insofar as said lease covers:
NW/4 SW/4 NW/4 Section 35-14N-7E

Net interest in production is 87.5000%.

62A&B Bruce Tiger and
Wilcox Tiger

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 29, 1959, from Stella Killgore, et vir, as Lessor, and Wilcox Oil Company, as Lessee, recorded in Book 857, Page 539, covering:

S/2 NE/4 Section 13-16N-9E

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 29, 1959, from Roy Dorrell, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 857, Page 541, covering:

S/2 NE/4 Section 13-16N-9E

Said lease provides for a $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

63 Hensley Tiger

All interest in and to Oil and Gas lease dated April 10, 1920, from W. E. Hensley, et ux, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 441, covering:

NE/4 NE/4, E/2 NW/4 NE/4, Section 13-16N-9E

Said lease provides for a $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

348 Salome Tiger

All interest in and to Oil and Gas lease dated June 26, 1919, from M. F. Pritchett, et ux, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 171, Page 559, covering:

E/2 SE/4 Section 12-16N-9E

Said lease provides for a $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

53 Lewis Bruner

All interest in and to Oil and Gas lease dated January 4, 1916, from P. B. J. Hudson, Gdn. of Est. of Lewis Bruner, as Lessor, to A. L. Harris, as Lessee, recorded in Book 126, Page 340, insofar as said lease covers:

West 20 acres of Lot 1 and West 20 acres of Lot 2 of NW/4 Section 18-16N-10E

Said lease provides for $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

Leases 62 A&B, 63, 348, 53 above are subject to

Plan of Unitization for the Tiger Dutcher Sand, dated December 30, 1959, between Wilcox Oil Company, as Operator, and Kirby Production Company, et al, as non-Operator, covering SE/4 SE/4 Section 12; NE/4 NE/4, E/2 NW/4 NE/4, S/2 NE/4, Section 13-16N-9E; West 20 acres of Lot 1 and West 20 acres of Lot 2, Section 18-16N-10E, in which Wilcox Oil Company owns 100% W. I.

6157 Roy Dorrell

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated August 5, 1963, from Roy Dorrell, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 989, Page 626, covering:

Lots 3 and 4 in SW/4 Section 18-16N-10E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 10.9375%.

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 31, 1963, from George Louis Slyman, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 945, Page 73, covering:

Lots 3 and 4 in SW/4 Section 18-16N-10E

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 32.8125%.

6158 Van Barrett

An undivided $\frac{1}{40}$ interest in and to Oil and Gas lease dated October 24, 1963, from J. Dyle Carmen, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 951, Page 136, covering:

SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 1.09375%.

EXHIBIT C-1 — Page 6

An undivided $\frac{1}{4}$ interest in SE/4 SW/4, an undivided $\frac{1}{2}$ interest in S/2 SW/4 SE/4, an undivided $\frac{1}{4}$ interest in N/2 SW/4 SE/4, an undivided $\frac{1}{4}$ interest in S/2 NE/4 SW/4 as covered in Oil and Gas lease dated August 15, 1963, from Van Barrett, et ux, as Lessor, to Wilcox Oil Company, recorded in Book 949, Page 610.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 14.58333%.

An undivided 50/560 interest in and to Oil and Gas lease dated August 12, 1963, from The First National Bank and Trust Company of Oklahoma City, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 954, Page 110, covering S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 3.90625%.

An undivided 1/28 interest in and to Oil and Gas lease dated August 12, 1963, from Elva Wolfe, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 954, Page 112, covering S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.5625%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 24, 1963, from John P. Carman, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 612, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 22, 1963, from Gertrude Chenoweth, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 614, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 22, 1963, from Yukola Palmer, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 620, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 22, 1963, from Gladys Carman McAdams, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 618, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 3/64 interest in and to Oil and Gas lease dated September 3, 1963, from Fay Adelaide McKiddy, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 622, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 2.05078%.

An undivided 1/64 interest in and to Oil and Gas lease dated September 5, 1963, from John S. Humphrey, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 624, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 0.68359%.

An undivided 1/32 interest in and to Oil and Gas lease dated August 12, 1963, from Marjorie Bullis, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 626, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.36719%.

An undivided 4/320 interest in and to Oil and Gas lease dated August 12, 1963, from Elva Wolfe, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 628, covering SE/4 SW/4, SW/4 SE/4 Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 0.546875%.

An undivided 9/60 interest in and to Oil and Gas lease dated August 12, 1963, from E. P. Kirschner, Trustee, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 630, covering SE/4 SW/4, S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 6.56250%.

An undivided 1/60 interest in and to Oil and Gas lease dated November 7, 1963, from A. J. Pfister, as Lessor, to Wilcox Oil Company as Lessee, recorded in Book 949, Page 632, covering SE/4 SW/4, S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 0.72916%.

An undivided 1/16 interest in and to Oil and Gas lease dated December 16, 1963, from Fred X Sulzback, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 634, covering W/2 SW/4 SE/4 Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 2.734375%.

An undivided 1/32 interest in and to Oil and Gas lease dated December 11, 1963, from Alberta V. Humphrey, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 616, covering N/2 SW/4 SE/4 Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 1.36719%.

6159 Claud James

Oil and Gas lease covering an undivided $\frac{1}{2}$ interest in and to W/2 SE/4 SE/4 and full interest in E/2 SE/4 SE/4, dated August 6, 1963, from Kenneth Dale James, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 944, Page 47, covering above lands Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 21.8750%.

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated August 13, 1963, from Mack L. Dunham, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 944, Page 48, covering W/2 SE/4 SE/4, Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 10.9375%.

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated August 9, 1963, from Viney May Murphy, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 944, Page 45, covering W/2 SE/4 SE/4 Section 13-16N-9E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 10.9375%.

Leases 6157, 6158 and 6159 above subject to:

1. Plan of Unitization for the Barrett Dutcher Sand Unit, dated November 13, 1963, between Wilcox Oil Company, as Operator, and Sunray DX Oil Company, as non-Operator, covering NE/4 SW/4, N/2 SE/4, SE/4 SW/4, SW/4 SE/4, SE/4 SE/4, Section 13-16N-9E; Lot 8 in SW/4, Section 18-16N-10E, in which Wilcox Oil Company owns 50.0000% W. I.

Net interest in production in the above tracts is as follows:

SE/4 SW/4	20.9375%
S/2 SW/4 SE/4	40.4688%
N/2 SW/4 SE/4	41.2500%
S/2 NE/4 SW/4	9.9744%

- 1245 Daniel Hope
All interest in and to Oil and Gas lease dated February 5, 1924, from Daniel Hope, et ux, as Lessor, to G. C. Hall, as Lessee, recorded in Book 262, Page 160, covering:
W/2 SW/4, SE/4 SW/4 Section 3-17N-9E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 15.90575%.
- 422 Sarah Lindsey
All interest in and to Oil and Gas Mining lease dated July 6, 1922, from Sarah Tiger, et vir, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 263, Page 52, (Department Lease 46273, Contract No. 6621), covering:
E/2 NE/4, NW/4 SE/4, Section 10-17N-9E; NW/4 SW/4 Section 11-17N-9E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 15.90575%.
- Leases 1245 and 422 above subject to:
Plan of Unitization Bruce Pool Prue Sand Unit dated November 11, 1960, between Sinclair Oil and Gas Company, as Operator, and Wilcox Oil Company, et al, as non-Operator, covering:
SW/4 SW/4 SW/4, Section 2; NE/4, SE/4 NW/4, S/2 NE/4 NW/4, S/2 SW/4 NW/4, SE/4 NW/4 NW/4, S/2 Section 3; S/2 SE/4, NE/4, NE/4 SE/4, N/2 SE/4 SE/4, Section 4; E 3/4 NW/4, NE/4, NE/4 NE/4 SW/4, E/2 SE/4 SW/4, W/2 SE/4 Section 10; W/2 W/2 NW/4, Section 11-17N-9E, in which Wilcox Oil Company owns an 18.178% W. I.
Net interest in production is 11.10575%.
- 5401 Ernest Anthis
All interest in and to Oil and Gas lease dated March 19, 1954, from Ernest R. Anthis, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 701, Page 599, covering:
E/2 NW/4, NE/4 SW/4 Section 22-18N-10E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 52.01837%.
- 5400 Pearl Waggoner
An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated January 11, 1954, from Pearl J. Waggoner, as Lessor, and Wilcox Oil Company, as Lessee, recorded in Book 701, Page 595, covering:
W/2 NE/4, W/2 SE/4 Section 22-18N-10E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 26.00919%.
- An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated March 10, 1954, from The First National Bank and Trust Company of Oklahoma City, Executor of the Estate of Rosa B. Wright Rettenmeyer, Deceased, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 701, Page 597, covering:
W/2 E/2 Section 22-18N-10E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 26.00919%.
- 6613 Cook-Anthis
An undivided $\frac{3}{8}$ interest in and to Oil and Gas lease dated April 22, 1954, from Ida B. Anthis, et al, as Lessor, to Marshall Drilling Company, as Lessee, recorded in Book 705, Page 239, covering:
N/2 NW/4 Section 15-18N-10E
An undivided $\frac{3}{8}$ interest in Oil and Gas lease dated April 22, 1954, from Monta V. Martindale, et al, as Lessor, to Marshall Drilling Company, recorded in Book 705, Page 241, covering:
N/2 NW/4 Section 15-18N-10E
An undivided $\frac{3}{8}$ interest in Oil and Gas lease dated April 22, 1954, from Myrtle Wright, et vir, as Lessor, to Marshall Drilling Company, as Lessee, recorded in Book 705, Page 243, covering:
N/2 NW/4 Section 15-18N-10E
Leases under 6613 above provide for $\frac{1}{8}$ royalty subject to $\frac{1}{24}$ of $\frac{7}{8}$ overriding royalty.
Net interest in production from leases under 6613 above is 18.69408%.

5447 Jackson-Les (Stanley #1)

An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease from Pearl B. Jackson Company, a trust estate, as Lessor, to Pearl B. Jackson, lessee, recorded in Book 711, Page 846, covering:

E/2 NW/4 SW/4 SE/4, SW/4 NW/4, SW/4 SE/4, E/2 SW/4 SE/4, NE/4 SW/4, NW/4 SE/4 SW/4, W/2 NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SW/4 SW/4 SE/4, E/2 E/2 NW/4 SE/4, SE/4 NW/4, Section 15-18N-10E

Said lease provides for a $\frac{1}{2}$ Royalty subject to:

1. Operating Agreement dated January 16, 1956, between Wilcox Oil Company, as Operator, and Pearl B. Jackson, as non-Operator, covering E/2 NW/4, SW/4 SE/4, SW/4 NW/4 SW/4 SE/4, E/2 SW/4 SE/4, NE/4 SW/4, NW/4 SE/4 SW/4, W/2 NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SW/4 SW/4 SE/4, E/2 E/2 NW/4 SE/4, SE/4 NW/4, Section 15-18N-10E, in which Wilcox Oil Company owns a 50.0000% W. I.

Net interest in production insofar as lease is subject to (1.) above is 43.7500%.

Leases 5401, 5400, 5447 and 6613 above are subject to:

Plan of Unitization for the Red Fork Sand, Between Wilcox Oil Company, as Operator, and D. H. Cook, et al, as non-Operator, covering E/2 NW/4, W/2 NW/4 NE/4, E/2 NE/4 SW/4, E/2 SE/4 SW/4, less E/2 NE/4 SE/4 SW/4, SW/4 SE/4, less NW/4 NW/4 SW/4 SE/4, Section 15; E/2 E/2 NW/4, NW/4 NE/4, W/2 SW/4 NW/4 Section 22-18N-10E, in which Wilcox Oil Company owns a 59.4495% W. I.

**PRODUCING MINERALS
CREEK COUNTY, OKLAHOMA**

31 Willie Stepney

An undivided $\frac{2}{34}$ ths of 17.78/142.22nds of $\frac{1}{8}$ ths interest in and to the oil, gas and other minerals in and under

SW/4, less 17.78 acres in NE/4 SW/4, Section 24-15N-10E

62 Bruce Tiger and Wilcox Tiger

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
S/2 NE/4 Section 18-16N-9E

Said mineral interest subject to:

1. Plan of Unitization dated December 30, 1959, between Wilcox Oil Company, as Operator, and Kirby Production Company, et al, as Non-Operators, covering SE/4 SE/4 Section 12; NE/4 NE/4, E/2 NW/4 NE/4, S/2 NE/4 Section 13-16N-9E; West 20 acres of Lot 1 and West 20 acres of Lot 2, Section 18-16N-10E

181 Lucy Barnett

An undivided $\frac{1}{320}$ interest in and to the oil, gas and other minerals in and under
N/2 NW/4, SW/4 NW/4 Section 25-16N-9E

and undivided $\frac{4}{320}$ interest in and to the oil, gas and other minerals in and under
N/2 NW/4, SW/4 NW/4 Section 25-16N-9E

The above interests are subject to:

1. Oil and Gas lease dated December 22, 1919, from George R. McConnell, et al, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, page 215, providing for $\frac{1}{2}$ royalty.

2578 Mattie Coachman

An undivided $\frac{1}{24}$ interest in and to oil, gas and other minerals in and under
W/2 NE/4 Section 20-17N-7E

**PRODUCING OVERRIDING ROYALTY
CREEK COUNTY, OKLAHOMA**

1245 Daniel Hope

An undivided $\frac{1}{16}$ th of $\frac{7}{8}$ ths overriding royalty as reserved in Assignment dated April 8, 1940, from H. F. Wilcox Oil and Gas Company, as Assignor, to L. B. Jackson, as Assignee, recorded in Book_____, page_____, and amended by instrument dated May 19, 1941, recorded in Book_____, page_____ covering

NE/4 NW/4 SW/4 Section 8-17N-9E

Said overriding royalty subject to:

1. Plan of Unitization Bruce Pool Prue Sand Unit dated November 11, 1960, between Sinclair Oil & Gas Company, as Operator, and Wilcox Oil Company, et al, as Non-Operators, covering SW/4 SW/4 SW/4, Section 2; NE/4, SE/4 NW/4, S/2 NE/4 NW/4, S/2 SW/4 NW/4, SE/4 NW/4 NW/4, S/2, Section 3; S/2 SE/4, NE/4, NE/4 SE/4, N/2 SE/4 SE/4 Section 4; E $\frac{3}{4}$ NW/4, NE/4, NE/4 NE/4 SW/4, E/2 SE/4 SW/4, W/2 SE/4 Section 10; W/2 W/2 NW/4, Section 11-17N-9E, in which Wilcox Oil Company owns an 18.178% W. I.

**PRODUCING LEASES
CUSTER COUNTY, OKLAHOMA**

5429 Pearl Presnell

Oil and Gas lease dated April 29, 1954 by and between Pearl Hammons et al, as Lessors, and O. Anderson, as Lessee, recorded in Book 41 misc., pages 262-3, covering all interest in:
240 acres, more or less, being S/2 NE/4 and NW/4 (less Railroad Right-of-way) of Section 20-15N-14W

Said lease provides for a $\frac{1}{8}$ royalty and is subject to that certain Operating Agreement, dated December 11, 1963, by and between Sun Oil Company, as Operator and Wilcox Oil Company et al, as Non-Operators, covering all of Section 20-15N-14W, operated as the Pearl Presnell Unit, in which Wilcox owns a 37.50% Working Interest and a 32.8125% Net Revenue Interest.

6188-A Burgtorf (Custer City) Unit

An undivided interest in the following described Oil and Gas Leases:

1. Oil and Gas Lease dated November 16, 1957, by and between C. A. Burgtorf et ux, as Lessor, and Eason Oil Company, as Lessee, recorded in Book 24, pages 3-4, records of Custer County, Oklahoma, INsofar AND ONLY INsofar AS SAID LEASE COVERS:
Lots 1, 2, 3, 4, 5 and SE/4 NW/4 in Section 6-13N-15W
and ratified by Richard H. Burgtorf, M. D. by ratification instrument dated November 16, 1957 and recorded in Book 40, page 595 of the records of said County.
2. Oil and Gas Lease dated March 25, 1958 by and between Thomas A. Schneider et ux, as Lessor, and R. B. Strong, as Lessee, recorded in Book 24, pages 591-92 of the records of Custer County, Oklahoma, INsofar AND ONLY INsofar AS SAID LEASE COVERS:
The SW/4 of Section 6-13N-15W
3. Oil and Gas Lease dated February 26, 1953, by and between Thomas A. Schneider et ux, as Lessor, and Tidewater Oil Company, as Lessee, recorded in Book 36 misc., pages 277-8 of the records of Custer County, Oklahoma, covering:
SE/4 and S/2 NE/4 of Section 6-13N-15W

said interests in the above described Oil and Gas leases having been acquired by Wilcox Oil Company by virtue of that certain Operating Agreement, dated November 21, 1958, as amended by and between Gulf Oil Corporation, as Operator and Wilcox Oil Company et al, as Non-Operators. Each of the above described leases provide for 1/8th royalty and Wilcox Oil Company's interests are as follows:

6.7826% of 7/8 W. I.	.059348
Plus 7.2541% of 6.5% of 7/8 W. I.	.004126*

*This interest will revert to Kenneth A. Spencer when the working interest owners have received 300% of Spencer's share of the cost of completing the BURGTORF NO. 1 WELL.

**PRODUCING LEASES
DEWEY COUNTY, OKLAHOMA**

5745 Reuben Pankratz

Oil and Gas Lease, dated May 28, 1956 by and between Reuben Pankratz et ux, as Lessors, and J. J. Wright, as Lessee, recorded in Book 89, page 80 of the records of Dewey County, Oklahoma, covering all interest in
160 acres, being E/2 NE/4 of Section 34; and W/2 NW/4 Section 35-18N-17W

Said lease, insofar as same covers W/2 NW/4 Section 35-18N-17W, is subject to that certain Operating Agreement, dated February 21, 1963, by and between Sarkeys, Inc., as Operator, and Wilcox Oil Company, et al, as Non-Operators, covering all of Section 35-18N-17W, in which Wilcox owns 12.50% Working Interest and .10937500 Net Revenue Interest.

**PRODUCING LEASES
ELLIS COUNTY, OKLAHOMA**

6295 H. A. Jontra

Oil and Gas lease, dated December 31, 1955 by and between H. A. Jontra et ux, as Lessor, and W. B. McNeal, as Lessee, recorded in Book 78, pages 182-3, covering all interest in:
80 acres, being W/2 NE/4 Section 11-22N-25W

said lease provides for $\frac{1}{8}$ royalty and is also subject to an overriding royalty of 1/16 of 7/8ths, which is owned by Poor Boy Oil Company. Said lease is further subject to that certain Operating Agreement, dated February 13, 1963, by and between Pan American Oil Corporation, as Operator, and Wilcox Oil Company et al, as Non-Operators, Operated as Fields Unit, covering:

All of Section 11-22N-25W

in which Wilcox owns 12.50% interest by virtue of the inclusion of the above described Oil and Gas lease in said Unit.

EXHIBIT C-1 — Page 11

**PRODUCING MINERALS
ELLIS COUNTY, OKLAHOMA**

2242 Charles J. White

An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under and that may be produced from

200 Acres, being SW/4 and NW/4 NE/4 of Section 1-23N-26W

All of said mineral interest being subject to that certain Operating Agreement, dated February 10, 1960, by and between Phillips Petroleum Company, as Operator, and Wilcox Oil Company et al, as Non-Operators, covering all of Section 1-23N-26W, Operated as the White "A" Unit, in which Wilcox owns .1562125, Working Interest plus .1562125 Royalty Interest

2257 George Hunter

An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under and that may be produced from:

480 acres, being S/2, S/2 NE/4 and S/2 NW/4 Section 10-22N-25W

Said mineral interest is subject to the following:

1. Oil and Gas lease dated May 26, 1961, recorded in Book 122, page 117, as amended by instrument dated July 19, 1961, recorded in Book 123, page 285-7, by and between Wilcox Oil Company, as Lessor and Pan American Petroleum Corporation, as Lessee, covering an undivided 160 acre interest in the above described tract.
2. Operating Agreement dated June 14, 1961, by and between Pan American Petroleum Corporation, as Operator, and Wilcox Oil Company, as Non-Operator, Operated as the Hunter Unit, covering:
All of Section 10-22N-25W

in which Wilcox owns 12.50% of 7/8 Working Interest and a .0537110 Net Royalty interest.

**PRODUCING MINERALS
GARVIN COUNTY, OKLAHOMA**

947 N. R. Farris Royalty

An undivided $\frac{1}{2}$ interest in and to all of the oil, gas, coal and other minerals in or under:

Being 80 acres, more or less, E/2 SW/4 Section 28-3N-3W I. M.

Said interest is subject to:

1. Panther Creek Hart Sand Unit Agreement between Phillips Petroleum Company, Operator and Wilcox Oil Company, et al, Non-Operators forming a 6,640 acre Unit for production of oil and gas from the Hart Sand.

Wilcox Net Interest in Unit

.5178295

**PRODUCING LEASES
GRANT COUNTY, OKLAHOMA**

5557 Minnie Burghardt

Oil and Gas Lease, dated October 5, 1951, by and between Minnie Burghardt et vir, as Lessor and J. Floyd Brown, as Lessee, recorded in Book 100, page 494, covering an undivided one-fourth interest in:
159.62 acres, being all of Lots 3, 4 and E/2 SW/4 Section 7-28N-8W

Subject to Operating Agreement dated February 3, 1955, between Wilcox Oil Company, et al, designating Viersen and Cochran as Operator.

5588 Alice Greer

Oil and Gas Lease, dated October 30, 1951, by and between Alice Greer, a widow, as Lessor and Carl E. Gungoll, as Lessee, recorded in Book 116, page 452, covering an undivided one-fourth ($\frac{1}{4}$) interest in:
159.36 acres, being all of the NW/4 Section 7-28N-8W

Subject to Operating Agreement dated February 3, 1955, between Wilcox Oil Company, et al, designating Viersen and Cochran as Operator.

4936 Forest Gordon

Oil and Gas Lease, dated October 31, 1951, by and between Forest Lee Gordon et ux, as Lessor and Wilcox Oil Company, as Lessee, recorded in Book 105, page 542, covering all interest in:
160 acres being NE/4 Section 25-28N-6W

EXHIBIT C-1 — Page 12

4896 Fred Matthews

Oil and Gas Lease, dated September 20, 1951, by and between Fred Matthews et ux, as Lessors, and Wilcox Oil Company, as Lessee, recorded in Book 106, page 118, of the records of Grant County, Oklahoma, as amended by instrument dated December 7, 1957, recorded in Book 156, page 187, and covering all interest in:

160 acres, being all of SE/4 Section 18-28N-7W

This lease provides for 1/8th royalty and is subject to the following:

1. Declaration of Pooling, dated June 18, 1957, by and between Wilcox Oil Company and Calvert Drilling, Inc., recorded in Book 156, page 236, pooling the above described lease with Calvert's lease creating an operating unit for gas production covering SE/4 and S/2 NE/4 Section 18-28N-7W.
2. Operating Agreement, dated June 18, 1957, between Wilcox Oil Company, as Operator, and Calvert Drilling, Inc., as Non-Operator, covering operations under the above described Declaration of Pooling. Wilcox owns $\frac{1}{2}$ of $\frac{1}{8}$ W. I. and 58.3333% of the Total Production.

4906 Arthur Green

Oil and Gas Lease, dated September 19, 1951, as amended by and between Arthur E. Green et ux, as Lessors, and Wilcox Oil Company, as Lessee, recorded in Book 106, page 124, of the records of Grant County, Oklahoma, covering all interest in:

160 acres, being all of NW/4 Section 13-28N-7W

This lease provides for 1/8th royalty and is subject to the following:

1. Declaration of Pooling, dated July 1, 1957, by and between Wilcox Oil Company et al, pooling the above described lease with other lands creating an Operating Unit for the production of gas, gas distillate and condensate covering NW/4 Section 13 and SW/4 Section 12-28N-7W.
2. Operating Agreement, dated June 25, 1957, between Woods Petroleum Corporation, as Operator, and Wilcox Oil Company et al, as Non-Operators, operated as Green "B" Unit, covering operations under the above described Unit. Wilcox owns 50% Working Interest and 43.7500% Net Revenue Interest.

**PRODUCING MINERALS
GRANT COUNTY, OKLAHOMA**

5555 Mary Leisure

An undivided $\frac{1}{4}$ of $\frac{3}{32}$ of $\frac{7}{8}$ overriding royalty interest in and to:
160 acres, more or less, being NE/4 of Section 7-28N-8W

Said Interest is subject to:

1. Corporation Commission Order dated December 30, 1960 adding 120 acres to gas producing area. (Wilcox owns no interest in this 120 acres).
2. Farmout Agreement, as amended, dated November 2, 1959.

Net Interest:

1. On Oil Production .0205078 ORI
2. In gas spacing pool .01171875 ORI

**PRODUCING LEASES
HARPER COUNTY, OKLAHOMA**

5886 Marvin Price "A"

Oil and Gas lease dated April 26, 1947, from Marvin Price, et ux, Lessor, to J. M. Huber Corporation, Lessee, recorded in Book 12, page 75 covering a $\frac{7}{16}$ interest;

Oil and Gas lease dated April 26, 1947, from Thos. G. Cook, et ux, Lessor to J. M. Huber Corporation, Lessee, recorded in Book 12, page 71, covering a $\frac{1}{32}$ interest;

Oil and Gas lease dated June 11, 1956, from Ernest Hulsey, Lessor, to Carl S. Ford, Lessee, recorded in Book 96, page 69, covering a $\frac{1}{32}$ interest;

160 acres being W/2 SE/4, E/2 SW/4 Section 21-26N-23W

Operated as Marvin Price lease in which Wilcox Oil Company has a .0615280 interest.
Each lease provides for a $\frac{1}{8}$ royalty.

5885 Lydia Palmer

Oil and Gas lease dated April 29, 1947, from David B. Palmer, et ux, Lessor, to J. M. Huber Corporation, Lessee, recorded in Book 12, page 67, covering a $\frac{1}{2}$ interest;

Oil and Gas lease dated June 8, 1956, from John M. McFadden, lessor to Carl S. Ford, Lessee, recorded in Book 96, page 75, covering a $\frac{1}{32}$ interest;

EXHIBIT C-1 — Page 13

Oil and Gas lease dated June 8, 1956 from John W. Delaney, Lessor, to Carl S. Ford, Lessee, recorded in Book 96, page 72, covering a 1/64 interest;

Oil and Gas lease dated June 8, 1956 from Central Commercial Company, Lessor, to Carl S. Ford, Lessee, recorded in Book 96, page 78, covering a 1/32 interest;

Oil and Gas lease dated July 28, 1956, from Anne H. Brinkman, Lessor, to Carl S. Ford, Lessee, recorded in Book 97, page 563, covering a 1/32 interest;

Oil and Gas lease dated August 17, 1956, from P. C. Mee, Lessor, to Eason Oil Company, Lessee, recorded in Book 97, page 561 covering a 1/64 interest;

160 acres being NE/4 Section 21-26N-23W

Operated as D. B. Palmer - Eason Oil Company lease, in which Wilcox Oil Company has .0615230 interest. The above two (2) tracts being subject to Joint Operating Agreement dated September 10, 1956, between Eason Oil Company, Operator, and Sunray Mid-Continent Oil Company, et al, Non-Operator, as subsequently amended, which "pools" the Working Interest under Section 21-26N-23W (Wilcox Oil Company's - Price Unit). All interest and contract rights which Wilcox Oil Company owns in the lands covered by said Operating Agreement, and which were created by virtue of Operating Agreement, are included herein. Operating Designations within the Area covered by said Operating Agreement are:

- 6007 1. NW/4 Section 21-26N-23W, Operated as Eldin Campbell - Eason Oil Company lease, in which Wilcox Oil Company has a .061523 interest.
- 6008 2. W/2 SW/4 Section 21-26N-23W, Operated as Earl Campbell - Eason Oil Company lease, in which Wilcox Oil Company has a .061522 interest.

5883 The following Oil and Gas leases:

Lessor	Lessee	Date	Recorded		Interest
			Book	Page	
Earl W. Corn	Carl S. Ford	6- 8-56	96	96	1/32
E. R. Humphrey	Carl S. Ford	6- 8-56	96	99	1/64
Albert Meier	Carl S. Ford	6- 8-56	96	102	1/64
Ben Boepple	Carl S. Ford	6- 8-56	96	105	1/64
Maggie Short	Carl S. Ford	6- 8-56	96	108	1/64
Edwin H. Levy	Carl S. Ford	6- 9-56	96	111	1/64
B. A. Jacobi	Carl S. Ford	6- 9-56	96	114	1/64
Esther M. DeHart	Carl S. Ford	6- 9-56	96	117	1/64
John H. Dorlon	Carl S. Ford	6- 8-56	96	120	11/2400
Wm. Bartels	Carl S. Ford	6- 8-56	96	123	1/300
Enid McDaniels	Carl S. Ford	6-11-56	96	126	1/64
Earl S. Williams	Carl S. Ford	6-11-56	96	129	1/64
W. S. Billings	Carl S. Ford	6- 8-56	96	132	1/32
R. L. Cassingham	Carl S. Ford	6- 8-56	96	135	1/64
G. B. Crawford	W. L. Horton	4-23-47	9	470	1/8

Said leases covering 300 acres being NE/4 Section 17, W/2 NE/4 SE/4, NW/4 SE/4, S/2 SE/4 Section 8-26N-23W

5882 The following Oil and Gas leases:

Lessor	Lessee	Date	Recorded		Interest
			Book	Page	
Rhea Herschberger	Carl S. Ford	6-11-56	96	84	60/1680
Homer L. Johnson	Carl S. Ford	6- 8-56	96	87	30/1680
C. R. Bleckley	Carl S. Ford	6- 9-56	96	90	*
Paul Satz	Carl S. Ford	6- 9-56	96	93	**28/1680
J. E. Osborne	Carl S. Ford	6-11-56	96	81	90/1680
Arthello W. Husted	J. M. Huber Corporation	4-26-47	12	51	60/1680
Harley M. Campbell	J. M. Huber Corporation	4-26-47	12	55	1140/1680
Ruben K. Sparks, Exec.	Carl S. Ford	1- 8-57	102	447	***42/1680

*17/1680 interest in N/2 SW/4, SE/4 SW/4 Section 8, 3/1680 interest in SE/4 NE/4, NE/4 SE/4 Section 7, SW/4 NW/4 Section 8, 45/1680 in NW/4 SE/4 Section 7.

**Only covers N/2 SW/4, SE/4 SW/4 Section 8

***Only covers SE/4 NE/4, NE/4 SE/4 Section 7, SW/4 NW/4 Section 8.

Insofar as said leases cover 280 acres being SE/4 NE/4, N/2 SE/4 Section 7, SW/4 NW/4, N/2 SW/4, SE/4 SW/4 Section 8-26N-23W.

EXHIBIT C-1—Page 14

- 5883A Wilcox lease No. 5883 subject to Operating Agreement dated September 1, 1960, between Eason Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering production of gas and/or gas condensate from the Tonkawa Sand under Section 17-26N-23W, Operated as George B. Crawford Unit, in which Wilcox Oil Company has a .87917 Working Interest.
- 5882A Wilcox leases No. 5883 and 5882 subject to Operating Agreement dated August 1, 1958, between Eason Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering production from surface to a depth of 7000 feet under Section 8-26N-23W, Operated as Harley Campbell Unit, in which Wilcox Oil Company has a .18434 Working Interest.
- 5882B Wilcox lease No. 5882 subject to Operating Agreement dated December 20, 1957, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering production of "gas" under Section 7-26N-23W, Operated As Madsen Gas Unit 1-7, in which Wilcox Oil Company has a .04589 Working Interest.
- 5988 O. A. Cleveland
Oil and Gas lease dated January 16, 1957, from O. A. Cleveland, et ux, Lessor to J. M. Huber Corporation, Lessee, recorded in Book 102, page 647, covering a 1/16 interest (in which Wilcox has a ¼ interest) in the following described land.
80 acres being W/2 NE/4 Section 18-26N-23W
- 5988A Lease provides for a ¼ royalty and is subject to Operating Agreement dated October 8, 1959, between Texoma Production, Operator, and Wilcox Oil Company, et al, Non-Operators, covering Section 18-26N-23W, Operated as J. F. Moberly Gas Unit, in which Wilcox Oil Company has a .0019526 Working Interest.
- 5890 Marvin Price "B"
Oil and Gas lease dated May 1, 1947, from Algy R. Palmer, et ux, Lessors, to J. M. Huber Corporation, Lessee, recorded in Book 12, page 88, covering all interest (in which Wilcox Oil Company has a ¼ interest) in the following described land.
160 acres being NW/4 Section 28-26N-23W
- Lease provides for a ¼ royalty and is subject to Operating Agreement dated February 1, 1957, between Eason Oil Company, Operator, and Wilcox Oil Company, Non-Operators, Operated as Eason Oil Company — Price Palmer lease, in which Wilcox Oil Company has a 25% Working Interest and 21.875% Revenue Interest.
- 5884 Oil and Gas lease dated June 11, 1956, from J. E. Osborne, Jr., Lessor, and Carl S. Ford, Lessee, covering a 1/32 interest in the following described land.
240 acres being NW/4, E/2 SW/4 Section 20-26N-23W
- Lease provides for a ¼ royalty and is subject to Operating Agreement dated August 1, 1957, between C. L. McMahon, Inc., Operator, and Wilcox Oil Company, et al, Non-Operators, covering E/2 SW/4 Section 20-26N-23W, Operated as Forest Oil Corporation — South Bend Lease, in which Wilcox Oil Company has a 1.56625% Working Interest and 1.3672% Revenue Interest
- 5739 Oil and Gas lease dated December 1, 1953, from Ida M. Jones, Lessor, to George D. Mong, Lessee, recorded in Book 81, page 114, covering all interest (Wilcox Oil Company owns a ½ Working Interest) in the following described land:
160 acres being Lots 1 and 2 (W/2 NW/4) Section 19-26N-23W, E/2 NE/4 Section 24-26N-24W.
- Lease provides for a ¼ royalty and is subject to a 1/16 of 7/8 Overriding Royalty Interest.
- 5942 Oil and Gas lease dated November 21, 1956, from Diversified Royalty Company of Oklahoma, Lessor, to Eason Oil Company, Lessee, recorded in Book 100, page 420, covering 3.75/79.29 interest (Wilcox Oil Company owns ½ Working Interest) in the following described land:
79.29 acres being Lots 3 and 4 of Section 19-26N-23W
- Lease provides for a ¼ royalty.
- 5739A Wilcox Oil Company lease 5739 subject to operating Agreement dated February 12, 1959, between Sunray Mid-Continent Oil Company, Operator and Wilcox Oil Company, et al, Non-Operators, covering Section 24-26N-24W, Operated as E. G. Gonser Unit (as to the Tonkawa Formation) in which Wilcox Oil Company has a 1/16 Working Interest and a 1/16 of 7/8 of 15/16 Revenue Interest.
- 5739B Wilcox Oil Company lease 5739 and 5942 are subject to Operating Agreement dated October 9, 1959, between Champlin Oil & Refining Co., Operator, and Wilcox Oil Company, et al, Non-Operators, covering as rights under Section 19-26N-23W, Operated as J. F. Moberly Gas Unit, in which Wilcox Oil Company has 6.48595% Working Interest and a 5.3378% Revenue Interest.

EXHIBIT C-1 — Page 15

- 5940 Oil and Gas lease dated November 21, 1956, from Diversified Royalty Company of Oklahoma, Lessor, to Eason Oil Company, Lessee, recorded in Book 100 page 422, covering 3.75/79.49 interest (Wilcox Oil Company owns ½ Working Interest) in the following described land:
79.49 as being Lots 1 and 2 of Section 30-26N-23W

Lease provides for a ⅓ royalty.

- 5941 J. E. Gibson "B"
Oil and Gas lease dated November 21, 1956, from Diversified Royalty Company of Oklahoma, Lessor, to Eason Oil Company, Lessee, recorded in Book 100, page 418 covering 5/120 interest (Wilcox Oil Company owns ½ Working Interest) in the following described land:
120 acres being NE/4 SW/4, N/2 SE/4 Section 30-26N-23W

Lease provides for a ⅓ royalty

- 5940A Wilcox Oil Company leases 5940 and 5941 subject to Operating Agreement dated March 1, 1960, between Champlin Oil & Refining Co., Operator, and Wilcox Oil Company, et al, Non-Operators, covering Gas and Gas Condensate produced from the Hoover Sand, as referred to in Oklahoma Commission Order No. 89580 (Cause C. D. No. 11841) dated May 6, 1959, as amended, underlying Section 30-26N-23W, Operated as E. G. Gonser Gas Unit, in which Wilcox Oil Company has .68441% Working Interest and .5989% Net Revenue Interest.

Wilcox Oil Company leases 5940 and 5941 subject to Operating Agreement dated March 1, 1960, between Champlin Oil & Refining Co., Operator, and Wilcox Oil Company, et al, Non-Operators, covering production from Tonkawa Sand Formation, underlying Lot 4, SE/4 SW/4, SW/4 SE/4 Section 19, Lots 1, 2, E/2 NW/4, W/2 NE/4 Section 30-26N-23W, Operated as E. G. Gonser Gas Unit (Tonkawa) in which Wilcox Oil Company has a .78099% Working Interest and a .6834% Revenue Interest.

- 5941A Wilcox Oil Company lease 5941 subject to Operating Agreement dated November 1, 1959, between An-Son Petroleum Corporation Operator, and Wilcox Oil Company, et al, Non-Operators, covering gas and gas condensate produced from Tonkawa Sand formation underlying NW/4 SE/4, E/2 SW/4, Lots 8 and 4 of Section 30-26N-23W, Lot 1, Section 31-26N-23W, Operated as Jackson "B" Unit in which Wilcox Oil Company has .6965% Working Interest and a Net Revenue Interest of .6965% of 87.5%; and is further subject to Declaration of Unit dated January 2, 1962, executed by An-Son Petroleum Corporation, et al, covering the same land.

Wilcox Oil Company lease 5941 also subject to Operating Agreement dated January 24, 1958 between An-Son Petroleum Corporation, Operator, and Wilcox Oil Company, et al, Non-Operators, covering N/2 SE/4, NE/4 SW/4 Section 30-26N-23W, in which Wilcox Oil Company's working interest is 2.083% and Revenue Interest is 1.8229%. NE/4 SE/4 Section 30-26N-23W Operated as An-Son Corporation—Jackson "A" lease; NW/4 SE/4 Section 30-26N-23W Operated as An-Son Petroleum — Jackson "B" lease.

PRODUCING MINERALS HARPER COUNTY, OKLAHOMA

- 2104 Thomas F. Shea
An undivided ⅓ interest in the oil, gas and other minerals in and under
160 acres being NW/4 Section 34-26N-26W
- 2104A Subject to Operating Agreement dated June 16, 1958, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering Section 33 and Section 34-26N-26W, operated as Robertson Gas Unit 1-34, in which Wilcox Oil Company has a 9.85% net revenue interest.
- This interest is further subject to "Declaration of Pool" Dated June 16, 1958, pertaining to production from the Morrow, the Hoover, the Chester and the Tonkawa formations underlying the same lands, executed by Shell Oil Company, et al.
- This interest also subject to "Deferred Gas Production Agreement" dated the _____ day of _____ 1959, between Superior Oil Company, et al.
- 2222 Guy Thomas
An undivided ¼ interest in and to the oil, gas and other minerals in and under
320 acres being SE/4 Section 1, N/2 NE/4 Section 12-28N-26W, Lots 6 and 7 of Section 6-28N-25W
- 2222A Subject to Operating Agreement dated May 31, 1961, between Blackwell Zinc Company, Inc., Operator, and Wilcox Oil Company, et al, Non-Operators, covering Section 12-28N-26W, operated as Rader Unit in which Wilcox Oil Company has a 3.125% interest.
- 2141 James M. Crissup:
An undivided ⅓ interest in and to the oil, gas and other minerals in and under
160 acres being SW/4 NW/4, W/2 SW/4 Section 2-25N-22W, NW/4 NW/4 Section 11-25N-22W

EXHIBIT C-1 — Page 16

2141A Subject to Operating Agreement dated February 28, 1962, between H. F. Sears, Operator, and Wilcox Oil Company, Non-Operators, covering Section 2-25N-22W, operated as Cooper Unit, in which Wilcox Oil Company has a 9.375% interest.

2275 Guy Thomas No. 2
an undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
320 acres being Lots 1, 2 and 3 and S/2 NE/4, S/2 NW/4 Section 1; and SE/4 NE/4 Section 2, all
in 28N-26W

Subject to Oil and Gas lease dated December 6, 1963, between Wilcox Oil Company, as Lessor, and The Headington Company, as Lessee, covering Lots 1, 2, 3 and S/2 NE/4 and S/2 NW/4 and SE/4 Section 1-28N-26W.

PRODUCING LEASES HUGHES COUNTY, OKLAHOMA

4576 Martha Thompson
Oil and Gas Mining Lease, dated November 14, 1949, by and between Martha Thompson, a single woman, as Lessor, and Wilcox Oil Company, as Lessee, recorded in Book 150 misc., page 571, insofar as said lease covers an undivided $\frac{1}{4}$ interest in
40 acres being NE/4 SE/4 Section 16-8N-11E

5669 Alonzo Perry
Oil and Gas lease, dated September 12, 1955, by and between Alonzo Perry et ux, as Lessor, and Harry H. Diamond, Inc., as Lessee, recorded in Book 243 misc., page 173, insofar as said lease covers an undivided $\frac{1}{4}$ interest in
120 acres being all of the W/2 SE/4 and SE/4 SE/4 Section 16-8N-11E

The above described Oil and Gas leases each provide for $\frac{1}{8}$ royalty and are subject to that certain Operating Agreement, dated July 12, 1956, by and between Earlsboro Oil and Gas Co., Inc., Operator, and Wilcox Oil Company, as Non-Operator, covering all of SE/4 Section 16-8N-11E, in which Wilcox owns a $\frac{1}{4}$ W. I. and 0.21875 net revenue interest.

PRODUCING LEASES LINCOLN COUNTY, OKLAHOMA

2926 A. W. Lycan
All interest in and to Oil and Gas lease dated November 12, 1937, from A. W. Lycan, Attorney-in-fact, as Lessor, to Floyd G. Hubbell, as lessee, recorded in Book 111, page 125 covering
160 acres, SW/4 Section 11-14N-6E

Said lease provides for $\frac{1}{8}$ royalty

1096 Sac & Fox
All interest in and to Oil and Gas lease dated April 26, 1935, from Sac & Fox Business Committee of Oklahoma, as Lessor, to Wilcox Oil and Gas Company, as lessee, recorded in Book 106, page 469, covering
720 acres, SE/4, Section 21; N/2 SW/4, NW/4, NW/4 NE/4, Section 22; SW/4, S/2 NW/4, Section 15; SE/4 SE/4, Section 16-14N-6E

Said lease provides for $\frac{1}{8}$ royalty

2789 All interest in and to Oil and Gas lease dated June 16, 1936, from H. F. Delozier, et ux, as Lessor, to H. F. Wilcox Oil and Gas Company, as lessee, recorded in Book 109, page 33, covering
160 acres, S/2 SW/4, Section 10; N/2 NW/4, Section 15-14N-6E

Said lease provides for $\frac{1}{8}$ royalty.

2793 H. M. Fitch
All interest in and to oil and gas lease dated January 5, 1935, from H. M. Fitch, et al, as Lessor, to B. B. Blair, as Lessee, recorded in Book 104, page 189, covering
160 acres NE/4 Section 15-14N-6E

Said lease provides for $\frac{1}{8}$ royalty

2794 Lucy Saylor
All interest in and to Oil and Gas lease dated January 9, 1935, from Lucy Saylor, as Lessor, to B. B. Blair, as Lessee, recorded in Book 104, page 246, covering
160 acres NW/4 Section 14-14N-6E

Said lease provides for $\frac{1}{8}$ royalty.

- 3083 Charles Terry #1
All interest in and to Oil and Gas lease dated December 8, 1936, from Charles Terry, et ux, as Lessor, to A. G. Thompson, et al, as Lessee, recorded in Book 109, page 432, covering
40 acres being, SE/4 SE/4 Section 9-14N-6E

Said lease provides for $\frac{1}{8}$ royalty subject to:
1. An overriding royalty of $\frac{1}{8}$.
- 3031 State School Land North #14
All interest in and to oil and gas lease dated February 14, 1938, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 112, page 639, covering
-80 acres W/2 NE/4 Section 16-14N-6E

Said lease provides for $\frac{1}{8}$ royalty.
- 3077 School Land #15 South
All interest in and to Oil and Gas lease dated May 16, 1938, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil & Gas Company, as Lessee, recorded in Book 118, page 200 covering
80 acres in the W/2 SE/4 Section 16-14N-6E

Said lease provides for $\frac{1}{8}$ royalty.
- 3078 School Land "A" #16
All interest in and to Oil and Gas lease dated May 16, 1938, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil and Gas Company, Lessee, recorded in Book 118, page 197 covering
80 acres E/2 SW/4, Section 16-14N-6E

Said lease provides for $\frac{1}{8}$ royalty.
- 3103 School Land #16
All interest in and to Oil and Gas lease dated April 10, 1939, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 115, page 535, covering
80 acres W/2 SW/4 Section 16-14N-6E
- 2925 A. A. Furry
All interest in and to Oil and Gas lease dated April 27, 1935, from A. A. (Americus) Furry, as Lessor, to Ross Oil Company, as Lessee, recorded in Book 104, page 278, covering
80 acres N/2 NE/4, Section 21-14N-6E
Said lease provides for $\frac{1}{8}$ royalty
- 3158 The Evans Co. #3 "B"
All interest in and to Oil and Gas lease dated August 13, 1934, from Evans Brothers Land Company, as Lessor to Sinclair Prairie Oil Company, as Lessee, recorded in Book 104, page 326, covering
40 acres NE/4 NW/4 Section 21-14N-6E

Said lease provides for $\frac{1}{8}$ royalty subject to:
1. An overriding royalty of $\frac{1}{16}$ of $\frac{7}{8}$

An undivided $\frac{1}{8}$ interest in and to Oil and Gas lease dated February 3, 1953, from Will Zabondil, et ux as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 285, covering
80 acres being S/2 SW/4 Section 22-14N-6E

An undivided $\frac{1}{8}$ interest in and to Oil and Gas lease dated February 3, 1953, from Zula Kilpatrick, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 287, covering
80 acres being S/2 SW/4 Section 22-14N-6E
- 4807 Flora Pickett
All interest in and to Oil and Gas lease dated January 22, 1951, from Flora A. Pickett, as Lessor, to Jess Powell, as Lessee, recorded in Book 174, page 487, insofar as said lease covers
80 acres being S/2 NW/4 Section 21-15N-3E

Said lease provides for $\frac{1}{8}$ royalty subject to:
1. Operating Agreement dated April 30, 1956 between Davidor & Davidor, as Operator, and Wilcox Oil Company as Lessee, covering NW/4 Section 21-15N-3E, in which Wilcox Oil Company owns 50.0000% W. I.

Net interest in production in said unit is 43.7500%
- 6587 Wesley Phipps
An undivided $\frac{1}{8}$ of 687/1056 of 59/64 of 8/8 interest in and to oil and gas lease dated November 21, 1952, from Wesley A. Phipps, et ux, as Lessor, to S. B. Logan, as Lessee, recorded in Book 232, page 292, insofar as said lease covers
NW/4 SW/4, W/2 NE/4 SW/4, W/2 SW/4 SW/4 Section 22-15N-3E

EXHIBIT C-1 — Page 18

Wilcox Oil Company interest in this lease is limited to the Skinner sand formation only.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. Lease 4807 and 6587 above are subject to Plan of Unitization, Southwest Mount Vernon Skinner Sand Unit, effective September 1, 1961, between Sunset International Petroleum Corporation, as Operator, and Anchor Production Company, et al, as Non-Operator, covering E/2 SE/4 Section 17; S/2, E/2 SE/4 NE/4, Section 16; SW/4 NW/4, SW/4, Section 15; NE/4 NE/4, E/2 SE/4 NE/4, Section 20; Section 21, less W/2 SW/4 SW/4; NW/4, W 3/4 N/2 SW/4, W/2 SW/4 SW/4, Section 22; NE/4 NW/4, N 3/4 NE/4, Section 28-15N-3E, in which Wilcox Oil Company owns 6.999929% W. I.

Net interest in production in said unit is 6.1249379%

2981 The Evans Co. #1

All interest in and to Oil and Gas lease dated January 1, 1938, from the Evans Company, as Lessor, to Floyd T. Hubbell, as Lessee, recorded in Book 111, page 182, covering 120 acres, W/2, NW/4 SE/4 NW/4 Section 21-14N-6E.

Said lease provides for $\frac{1}{8}$ Royalty

3715 H. M. Fitch #2

All interest in and to Oil and Gas lease dated January 5, 1935, from H. M. Fitch, et al, as Lessor, to B. B. Blair, as Lessee, recorded in Book 104, page 189, insofar as said lease covers 80 acres being S/2 NE/4 Section 15-14N-6E

Said lease provides for $\frac{1}{8}$ royalty.

4531 Sac & Fox "B"

All interest in and to Oil and Gas lease dated March 9, 1949 from Sac & Fox Tribal Business Committee (Lease No. 1-51-Ind-48131) as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book _____, page _____, covering 40 acres being NE/4 SE/4 Section 16-14N-6E

Said lease provides for $\frac{1}{8}$ royalty.

4716 May

All interest in and to Oil and Gas lease dated March 31, 1937, from S. B. W. May, et al, as Lessor, to O. J. McCann, as Lessee, recorded in Book 108, page 173, insofar as said lease covers: 80 acres being S/2 SE/4 Section 10-14N-6E

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of 1/10 of 7/8 until a total of \$40,000.00 has been paid.

5265 C. L. Kenworthy

All interest in and to Oil and Gas lease dated December 8, 1982, from Chester L. Kenworthy, as Lessor, to The Texas Company, as Lessee, recorded in Book 97, page 488, insofar as said lease covers 80 acres, N/2 NW/4 SW/4, SW/4 NW/4 SW/4, Section 14-14N-6E

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{1}{8}$ of $\frac{1}{8}$

The above leases are subject to Plan of Unitization for the Prue Sand Formation of the Sac-Fox Pool dated October 31, 1951, between Wilcox Oil Company, as Operator, and Sinclair Oil & Gas Company, et al, as Non-Operator, covering S/2 SE/4 NE/4, N/2 NE/4 SE/4, SE/4 NE/4 SE/4, E/2 SE/4 SE/4, SW/4 SE/4 SE/4, Section 9; S/2 S/2 NW/4, SW/4 SW/4 NE/4, SW/4, W/2 NW/4 SE/4, S/2 S/2 SE/4, NE/4 SE/4, SE/4, NW/4 SW/4 SE/4 and SE $\frac{1}{2}$ of NE/4 SW/4 SE/4 Section 10; W/2 SW/4 SW/4, Section 11; W/2 W/2 NW/4, W/2 NW/4 SW/4, NE/4 NW/4 SW/4, Section 14; NE/4, W/2, N/2 NE/4 SE/4, W/2 SW/4 SE/4, NW/4 SE/4, less SE/4 SE/4 thereof, Section 15; E/2 NE/4, E/2 NW/4 NE/4, SW/4 NE/4, less NW/4 NW/4 thereof, SE/4, NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SE/4 SW/4 SW/4 Section 16; NE/4 NW/4 NW/4, N/2 NE/4 NW/4, N/2 N/2 NE/4, SE/4 NW/4 NE/4, Section 21; N/2 NW/4 NW/4, SE/4 NW/4 NW/4, and $\frac{1}{2}$ of NW/4 NE/4 NW/4, Section 22-14N-6E, insofar as lands covered thereby are contained within the boundary of said unit. Wilcox Oil Company owns a 77.40540908% W. I.

Net Interest in production in said unit is 85.532240%

Lease #1096 is subject to Plan of Unitization of Southeast Sac and Fox Prue Sand Unit dated October 31, 1955, between Sterling Oil of Oklahoma, as Operator, and Wilcox Oil Company, et al, as Non-Operators, covering SE/4 SE/4 NW/4 SE/4, E/2 SW/4 SE/4, S/2 NE/4 SE/4, SE/4 SE/4 Section 15; SE/4 NW/4 SW/4, SW/4 SW/4, W/2 SE/4 SW/4, SE/4 SW/4 SW/4, SW/4 SW/4 SE/4 Section 14; NW/4 NE/4, NW/4 SW/4 NE/4, NW/4 NE/4 NW/4 SW/4, N/2 NE/4 of SW/4, Section 23; N/2 NE/4, N/2 S/2 NE/4, SE/4 SE/4 NE/4 Section 22-14N-6E, insofar as lands covered thereby are contained within the boundary of said Unit. Wilcox Oil Company owns a 6.04321% W. I.

EXHIBIT C-1 — Page 19

Net interest in production in said Unit is 5.28781%

Lease No. 2926, above, insofar as same covers the E/2 SW/4 Section 11-14N-6E, and Lease 2794 insofar as same covers the E/2 NE/4 NW/4 Section 14-14N-6E, are subject to Plan of Unitization of the Stroud Prue Unit, dated November 31, 1953, created pursuant to authority of title 52, Oklahoma Statutes 1951, Sections 287.1 to 287.15, between Sunray Mid-Continent Oil Company, as Operator, and Wilcox Oil Company, et al, as Non-Operator, covering lands described therein and in which Wilcox Oil Company owns a 3.5083% W. I., due to interest in Tracts 26 and 28 as shown as Exhibit "A" attached thereto.

Net interest in production in said Unit is 3.06976%

5826 L. C. Ritts

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated January 30, 1953, from L. C. Ritts, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 281, covering
80 acres being S/2 SW/4 Section 22-14N-6E

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated January 30, 1953, from H. C. Pouder, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 283, covering
80 acres being S/2 SW/4 Section 22-14N-6E

PRODUCING MINERALS LINCOLN COUNTY, OKLAHOMA

2793 H. M. Fitch

An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
160 acres being NE/4 Section 15-14N-6E

2981 The Evans Co. #1

An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
240 acres being NW/4, N/2 SW/4 Section 21-14N-6E

The above leases are subject to Plan of Unitization for the Prue Sand Formation of the Sac-Fox Pool dated October 31, 1951, between Wilcox Oil Company, as Operator, and Sinclair Oil & Gas Company, et al, as Non-Operator, covering S/2 SE/4 NE/4, N/2 NE/4 SE/4, SE/4 NE/4 SE/4, E/2 SE/4 SE/4, SW/4 SE/4 SE/4, Section 9; S/2 S/2 NW/4, SW/4 SW/4 NE/4, SW/4, W/2 NW/4 SE/4, S/2 S/2 SE/4, NE/4 SE/4, SE/4, NW/4 SW/4 SE/4 and $\frac{1}{2}$ of NE/4 SW/4 SE/4 thereof, Section 10; W/2 SW/4 SW/4, Section 11; W/2 W/2 NW/4, W/2 NW/4 SW/4, NE/4 NW/4 SW/4, Section 14; NE/4, W/2, N/2 NE/4 SE/4, W/2 SW/4 SE/4, NW/4 SE/4, less SE/4 SE/4 thereof, Section 15; E/2 NE/4, E/2 NW/4 NE/4, SW/4 NE/4, less NW/4 NW/4 thereof, SE/4, NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SE/4 SW/4 SW/4 Section 16; NE/4 NW/4 NW/4, N/2 NE/4 NW/4, N/2 N/2 NE/4, SE/4 NW/4 NE/4, Section 21; N/2 NW/4 NW/4, SE/4 NW/4 NW/4, and $\frac{1}{2}$ of NW/4 NE/4 NW/4, Section 22-14N-6E, insofar as lands covered thereby are contained within the boundary of said unit. Wilcox Oil Company owns a 77.40540908% W. I.

Net Interest in production in said unit is 85.582240%

No. 2981 above as to the N/2 SW/4, Section 21-14N-6E, is subject to Joint Operating Agreement dated November 13, 1953, between The Texas Company, as Operator, and Wilcox Oil Company, as Non-Operator, covering the N/2 SW/4 Section 21-14N-6E, in which Wilcox Oil Company owns 25.0000% W. I.

Net interest in production is 25.0000%

3038 Joe Murphy

An undivided $\frac{1}{16}$ interest in and to the oil, gas and other minerals in and under
80 acres being E/2 SW/4 Section 7-14N-6E

Subject to Oil and Gas lease dated February 28, 1938, from Joseph Murphy, as Lessor, to Floyd G. Hubbell, as Lessee, recorded in Book 111, page 281, providing for $\frac{1}{4}$ royalty.

3037 Earl F. Renner Royalty

An undivided $\frac{2}{60}$ interest in and to the oil, gas and other minerals in and under
NW/4 NE/4, W/2 SW/4 NE/4 Section 7-14N-6E

And an undivided $\frac{8}{60}$ interest in and to the oil, gas and other minerals in and under the above described lands.

The above interest are subject to Oil and Gas lease dated January 14, 1961, from Wilcox Oil Company, as Lessor, to Willard Sowards, as Lessee, recorded in Book _____, page _____, providing for $\frac{1}{4}$ royalty.

3173 Wilhelm S. Renner

An undivided $\frac{5}{55}$ interest in and to the oil, gas and other minerals in and under
SE/4 NE/4, E/2 SW/4 NE/4 Section 7-14N-6E

Subject to lease dated November 30, 1960, from Wilcox Oil Company, as Lessor, to J. L. Cook, as Lessee, recorded in Book _____, page _____, providing for $\frac{1}{4}$ royalty.

EXHIBIT C-1 — Page 20

**PRODUCING OVERRIDING ROYALTY
LINCOLN COUNTY, OKLAHOMA**

3175 Thomas W. Renfro

An undivided 3/32 interest in and to oil, gas and other minerals in and under
NW/4 Section 8-14N-6E

As reserved in Assignment of Oil and Gas Lease dated September 29, 1944, from Wilcox Oil Company,
as Assignor, to Anderson-Prichard Oil Corporation, as Assignee, recorded in Book _____, Page

**PRODUCING LEASES
MAJOR COUNTY, OKLAHOMA**

5014 Lester Boatright

Oil and Gas Lease dated December 19, 1951 from Lester Boatright and wife Thelma Boatright, Lessors,
to U. I. Smith, Lessee, recorded in Book 141, page 110 of the records of Major County, Oklahoma, inso-
far as said lease covers the following described property:
160 acres being SE/4 Section 14-20N-16W

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Unitization Declaration dated January 18, 1960 creating the Branstetter Unit, unitizing all of
Section 14-20N-16W into a 640 acre unit for the production of natural gas and associated
condensate.

Wilcox interest in Unit is .250000 of 7/8.

6536 Albert Karber

Oil and Gas lease dated April 16, 1963 from Albert Karber and Bernice Karber, Lessors to Harmon and
Clay Oil Co., Lessees, recorded in Volume 241, page 226 of the records of Major County, Oklahoma,
insofar as said lease covers:

80 acres in E/2 SE/4 Section 21-20N-12W

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated June 4, 1963 covering operation of the Doane Unit for the production
of natural gas from all of Section 21-20N-12W, Wilcox interest in Unit is .125000 of 7/8

**PRODUCING MINERALS
MAJOR COUNTY, OKLAHOMA**

1716 Benjamin Penner Royalty

An undivided $\frac{1}{8}$ mineral interest acquired by Assignment of Deed dated January 19, 1928 from S. D.
Reynolds to H. F. Wilcox Oil and Gas Company recorded in Volume 38, page 117 of the records of
Major County, Oklahoma, under the following described property:

160 acres being NE/4 Section 21-20N-11W

Said mineral interest is subject to:

1. Operating Agreement dated June 9, 1961 for operation of the Bergman Unit for the production
of oil and gas from Section 21-20N-11W.

Wilcox Net interest in Unit is .125000 of 8/8

**PRODUCING LEASES
MUSKOGEE COUNTY, OKLAHOMA**

6264 Sarah Flusche

An undivided full interest in and to Oil and Gas lease dated February 15, 1962, from Leo Flusche, et ux, as Lessor, to Wilcox Oil Company, as lessee, recorded in Book 1166, Page 112, insofar as said lease covers:

80 acres being W/2 NE/4 Section 20-14N-17E

Said lease provides for a $\frac{1}{8}$ Royalty and is subject to:

Purchase and Connection Acknowledgment with Rock Island Oil and Refining Company, Inc., dated January 31, 1963.

Net interest in production .875000 W. I.

6265 Josephine Flusche

An undivided full interest in and to Oil and Gas lease dated February 15, 1962, from A. H. Flusche and Josephine Flusche, his wife, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Volume 1166, Page 109, insofar as said lease covers:

160 acres being SE/4 SW/ Section 17; E/2 NW/4, SW/4 NW/4 Section 20-14N-17E.

Said lease provides for a $\frac{1}{8}$ Royalty and is subject to:

Purchase Contract with Rock Island Oil and Refining Company Inc.

Net interest in production. 875000 W. I.

**PRODUCING LEASES
NOBLE COUNTY, OKLAHOMA**

5044 Carl Gottschalk

Oil and Gas lease dated January 4, 1952 from Carl Gottschalk, et ux, et al, Lessors to Wilcox Oil Company, Lessee, recorded in Book 34, page 284, records of Noble County, Oklahoma, insofar as said lease covers:

160 acres, more or less, in the SW/4 of Section 17-20N-1E I.M.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of 1/32 of 7/8.
2. Oil purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in production .847656 W.I.

5043 Helen Gottschalk

The following Oil and Gas leases

1. Lease dated January 2, 1952 from Sarah A. L. Swart, a widow, et al, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 282, Noble County, Oklahoma.

2. Lease dated January 4, 1952 from Carl O. Gottschalk et ux, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 283, Noble County, Oklahoma

INSOFAR AS SAID LEASES COVER THE FOLLOWING:

160 acres, more or less, NE/4 of Section 17-20N-1E I.M.

Said leases provides for a $\frac{1}{8}$ royalty and are subject to:

1. Outstanding overriding royalties in the amount of 1/32 of 7/8.
2. Purchase Agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in production .847656 W. I.

5045 Arthur Bower

Oil and Gas lease dated January 4, 1952, from Arthur L. Bower, et ux, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 285, of the records of Noble County, Oklahoma, insofar as said lease covers:

80 acres, more or less, in the W/2 of the SE/4 of Section 17-20N-1E I. M.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of 1/32 of 7/8.
2. Purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in production .847656 W. I.

5046 C. G. Bay

Oil and Gas lease dated January 4, 1952 from C. G. Bay, et ux Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 286 of records of Noble County, Oklahoma, insofar as said lease covers:

80 acres, more or less, in the E/2 SE/4 of Section 17-20N-1E I. M.

**PRODUCING LEASES
NOBLE COUNTY, OKLAHOMA**

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
2. Purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in Production .847656 W. I.

5047 Helen Wilson

Oil and gas lease dated January 8, 1952 from Helen M. Wilson, et al, Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 84, page 287 of the records of Noble County, Oklahoma, insofar as said lease covers:

160 acres, more or less, in the NE/4 of Section 20-20N-1E.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Sale of $\frac{1}{2}$ interest in the W/2 of NE/4 to Tennessee Gas Transmission Company, dated November 6, 1956.
2. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
3. Operating Agreement with Tennessee Gas Transmission Company dated the 1st day of November, 1956.
4. Purchase Agreement with Anderson-Prichard Oil Corporation.

Wilcox net interest in production:

1. West $\frac{1}{2}$ of the NE/4 .410156 W. I.
2. East $\frac{1}{2}$ of the NE/4 .847656 W. I.

5042 S. A. L. Swart

Oil and Gas lease dated January 2, 1952 from Sarah A. L. Swart, a widow, et al, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 84, page 280 of the records of Noble County, Oklahoma, insofar as said lease covers:

160 acres NW/4 of Section 17-20N-1E I. M.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
2. Purchase Agreement with Anderson-Prichard Oil Corporation.

Net interest in production .847656.

5870 Leonora Seids

Oil and Gas lease (an undivided $\frac{1}{2}$ interest) dated May 16, 1956 from Leonora M. Seids, et ux, et al, to Tennessee Gas Transmission Company, recorded in Volume 75, page 121, of the records of Noble County, Oklahoma, insofar and only insofar as said lease covers:

80 acres more or less, E/2 NW/4 of Section 20-20N-1E.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated the 1st day of November, 1956 with Tennessee Gas Transmission Company.
2. Purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox net interest in production .437500 W. I.

**PRODUCING LEASES
OKLAHOMA COUNTY, OKLAHOMA**

- 2649 **H. H. Patton — Short**
Oil and Gas lease dated June 30, 1930 from T. R. Husted, Lessor, to H. H. Patton, Lessee, recorded in Volume 13, page 338 of the records of Oklahoma County, Oklahoma, insofar as said lease covers:
2.50 acres being All of Blk 6, Schillings Addition to Oklahoma City, Oklahoma

Said lease is subject to a $\frac{1}{8}$ royalty interest.

Wilcox Net Interest in production .875000.
- 2654 **Patton-Haynes**
An undivided .33558 interest in Oil and Gas lease dated June 28, 1930 from W. E. Mosier et al, Lessors, to H. H. Patton, Lessee, recorded in Volume 133, page 56 of the records of Oklahoma County, Oklahoma, insofar as said lease covers:
.043 acres being Lots in Block 7 of the Schillings Addition to Oklahoma City, Oklahoma

Lease provides for a $\frac{1}{8}$ royalty interest.

Wilcox interest in production is .33558 of $\frac{7}{8}$, subject to increase to .362500 of $\frac{7}{8}$ when all outstanding original encumbrances on production are paid.
- 2665 **Morgan-Bisbee**
An undivided 80/128 interest in Oil and Gas leases dated March 25, 1932 from E. F. Bisbee, et ux, Lessor, to C. E. Stout and D. Warsaski, Lessees, recorded in Volume 93, page 447 of the records of Oklahoma County, Oklahoma, and from Garrison Coal Company, Lessor to C. E. Stout and D. Warsaski, Lessees recorded in volume 87, page 341 of the records of said County; insofar as said leases cover:
All of Block 3 in Amended Plat of McCornack's Factory Addition to Oklahoma City, Oklahoma, lying in the NW/4 of Section 8-11N-3W
Containing .94 acres more or less.

Said leases are subject to a $\frac{1}{8}$ royalty interest and is subject to:
1. Aggregate overriding royalties of .125000

Wilcox Net interest in production .62500

**PRODUCING OVERRIDING ROYALTY
OKLAHOMA COUNTY, OKLAHOMA**

- 2661 **Jameson-Grimes**
An undivided $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty out of Oil and Gas lease dated January 23, 1931, from H. I. Grimes, et al, Lessor, to Joe Engberg, Lessee, recorded in Volume 170, Page 165, insofar as said lease covers:
All of Lots 2 and 3 of Block 1, and all of Blocks 2 and 3 out of the Second Riverside Addition to the City of Oklahoma City, Oklahoma County, Oklahoma, according to the recorded plat thereof.

Net interest in production is .054688 O.R.I.

**PRODUCING LEASES
OKMULGEE COUNTY, OKLAHOMA**

- 6153 **Bill Thompson "A"**
Oil and Gas lease dated October 24, 1958 from Wm. R. Thompson, et al, Lessors, to Wilcox Oil Co., Lessee recorded in Volume 828, page 153 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
160 acres being NE/4 Section 31-15N-11E

Lease provides for a $\frac{1}{8}$ royalty.

Wilcox Net interest in production .875000
- 6152 **Bertha Souby**
Oil and Gas lease dated June 11, 1958 from Bertha Souby, Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 826, page 350-351 of the records of Okmulgee County, Oklahoma insofar as said lease covers:
280 acres being NE/4, N/2 NW/4 and NW/4 SE/4 Section 32-15N-11E

Lease provides for a $\frac{1}{8}$ royalty.

Wilcox net interest in production .875000

EXHIBIT C-1 — Page 24

- 6134 **Ralph Getzendaner**
Oil and Gas lease dated June 1, 1958 from R. F. Harmon and J. F. Quinlan, Lessors to Wilcox Oil Company, Lessee, recorded in Volume 819 at page 255 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
160 acres being SW/4 Section 29-15N-11E
Lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. An outstanding overriding royalty of 1/16 of 7/8 as reflected by instrument of record.
Wilcox net interest in production 15/16 of .875000
- 6132 **Joe Barnett**
Oil and Gas lease dated June 10, 1924 from Wm. M. Thompson and Lelah Thompson, Lessors, to R. W. Kellough, Lessee, recorded in Volume 1, misc. camera rec. at page 233 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
80 acres being, S/2 SE/4 Section 29-15N-11E
Lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. An outstanding overriding royalty of 1/16 of 7/8 as reflected by instrument of record.
Wilcox Net interest in production 15/16 of .875000
- 6133 **Tobe Jefferson**
Oil and Gas lease dated July 23, 1918 from Elvira Berry, Lessor to Producer's and Refiners Corp. Lessee, recorded in Volume ML 39, page 586 of the records of Okmulgee County, insofar as said lease covers:
80 acres being, E/2 SE/4 Section 30-15N-11E
Said lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. An outstanding overriding royalty of 1/16 of 7/8 as reflected by instrument of record.
Wilcox net interest in production 15/16 of .875000
- 12 **Joe Lewis**
Oil and Gas lease dated June 22, 1917 from J. C. Doneghy, Lessor to H. F. Wilcox, Lessee, recorded in Volume M-155, page 231 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
80 acres, SE/4 NW/4 and Lot 2 Section 31-16N-12W
and:
Oil and Gas lease dated January 25, 1919 from J. C. Doneghy, Lessor, to H. F. Wilcox, Lessee, recorded in Volume M186, page 160 of the records of said County insofar as such lease covers:
Being 80 acres NE/4 NW/4 and Lot 1 Section 31-16N-12E
Said leases provides for a $\frac{1}{8}$ royalty.
Wilcox Net interest in production .875000
- 35 **Hattie Banks**
Oil and Gas lease dated September 23, 1918 from W. M. Thompson, et ux, Lessors to H. F. Wilcox, Lessee, recorded in Volume M-159, page 61 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
160 acres more or less in All the NE/4 of Section 30-15N-11E
Lease provides for a $\frac{1}{8}$ royalty interest.
Wilcox Net interest in production .875000
- 86 **Walter Banks**
Oil and Gas lease dated December 31, 1919 from Wm. M. Thompson et al, Lessors, to H. F. Wilcox Oil & Gas Co., Lessee, recorded in volume 405, page 621 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
80 acres being N/2 NW/4 of Section 30-15N-11E
Lease provides for a $\frac{1}{8}$ royalty.
Wilcox Net interest in production .875000

**PRODUCING LEASES
OSAGE COUNTY, OKLAHOMA**

- 3752 Osage #2 — E. Wister
Full interest in Oil Mining Lease No. 168 Ind 17443 dated August 1, 1944 from Osage Tribe of Indians in Oklahoma by Fred Lookout, Principal Chief, Lessors, to H. F. Wilcox Oil and Gas Company, Lessees, insofar as said lease covers:
160 acres, more or less, being Tract 438 (NW/4) Section 15-22N-8E
Said lease provides for a 1/6 royalty and is subject to:
1. Purchase Agreement with Sunray Mid-Continent Oil Company.
Net interest in production is .833333 W. I.
- 5642 Osage Tribe #74 (Sands)
An undivided $\frac{1}{2}$ interest in Oil Mining Lease No. 14-20-201-977 from Osage Tribe of Indians in Oklahoma, by Paul Pitts, Principal Chief, Lessors to The George Oil Company, Lessee, insofar as said lease covers:
160 acres, more or less, being NW/4 of Section 32-28N-8E I.M.
Said lease provides for a 1/6 royalty and is subject to:
1. Operating Agreement dated the 15th day of September, 1955 with Hanlon-Boyle, Inc.
2. Oil Purchase Agreement with Sinclair Crude Oil Company.
Wilcox Net interest in production .416667
- 5567 Osage Tribe #63 (Sutherland)
Full interest in Oil Mining Lease #14-20-201-3969 dated _____ day of 1955 from Osage Tribe of Indians in Oklahoma by Paul Pitts, Principal Chief, Lessors to Wilcox Oil Company, Lessee, insofar as said lease covers:
160 acres, more or less, being Tract 70 (SW/4) Section 14-21N-9E
Said lease provides for a 1/6 royalty and is subject to:
1. Oil Purchase Agreement with Tulsa Crude Oil Purchasing Corporation.
Wilcox Net interest in production: .833333 W.I.

**PRODUCING MINERALS
OSAGE COUNTY, OKLAHOMA**

- 2594 May Henson Royalty
An undivided $\frac{1}{4}$ share in and to an Osage Indian Headright acquired from John L. Dickson by Assignment dated October 30, 1930, said interest being equivalent to an undivided 164 acres interest in the oil and gas and other minerals in the Osage Indian Tribal Lands located in Osage County, Oklahoma.

**PRODUCING LEASES
PAWNEE COUNTY, OKLAHOMA**

- 5272 Edgar Clark
Oil and Gas lease dated July 10, 1953 from Edgar Waite Clark et al, Lessors, to Wilcox Oil Company, Lessees, recorded in Volume 27 A&G, page 137 of the records of Pawnee County, Oklahoma, insofar as said lease covers:
160 acres being S/2 SE/4 and S/2 SW/4 Section 26-21N-8E
Lease provides for $\frac{1}{6}$ royalty.
Wilcox Net interest in production .875000

PRODUCING LEASES PAYNE COUNTY, OKLAHOMA

4741 Edward Gould
Oil and Gas lease dated November 16, 1950 from Edward A. Gould and wife, and Edward A. Gould, Attorney for Kittie Grace Gould, Lessors, and Wilcox Oil Company, Lessees, recorded in Volume 60, page 212 of the records of Payne County, Oklahoma, insofar as said lease covers:
160 acres being NW/4 Section 25-20N-4E

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty interest of $\frac{1}{32}$ of $\frac{7}{8}$ as reflected by instrument of record.

Wilcox Net interest in production $\frac{31}{32}$ of .875000

4818 Ellen Lee
Oil and Gas lease dated May 3, 1951 from Ellen Lee and Sam Lee, Lessors to C. A. Bartholomew, Lessee recorded in Volume 61, page 278 of the records of Payne County, Oklahoma, insofar as said lease covers the following:
160 acres being NW/4 of Section 10-18N-2E

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated August 3, 1951, between Wilcox Oil Company, Amerada Petroleum Corporation and Cities Service Oil Company covering all of Section 10-18N-2E "pooling" working interests in which Wilcox has a .500000 interest. All rights and obligations accruing to Wilcox by virtue of such agreement are included herein. Interests in which Wilcox participates are as follows:

4819 Mary Burris
(1) Oil and Gas lease dated May 7, 1951, from Mary Burris, Lessor, to C. A. Bartholomew, Lessee recorded in Volume 61, page 280 of the records of Payne County, Oklahoma, insofar as said lease covers:
W/2 SW/4 NE/4 of Section 10-18N-2E

Said lease provides for a $\frac{1}{8}$ royalty interest.

4941 S. C. Caldwell
(2) Oil and Gas lease dated July 30, 1948 from Zenas Axtell et al, Lessors, to Cities Service Oil Company, Lessee recorded in Volume 52 of page 510 of the records of Payne County, Oklahoma, insofar as said lease covers:
160 acres being SE/4 Section 10-18N-2E

Said lease provides for a $\frac{1}{8}$ royalty interest.

4820 Sam Lee
The following Oil and Gas leases, insofar as they cover the following lands in Payne County, Oklahoma:
160 acres Being SW/4 Section 8-18N-2E

Lease	Date	Lessor	Lessee	Recordation	Interest
a	5-3-51	Sam Lee, et ux	C. A. Bartholomew	Vol 61, page 282	1/4
b	5-3-51	W. H. Hall, et ux	C. A. Bartholomew	Vol 61, page 286	7/32
c	5-3-51	Carl Wetzal, et ux	C. A. Bartholomew	Vol 61, page 284	1/2
d	5-3-51	T. F. Sitton	C. A. Bartholomew	Vol 61, page 288	1/32

Said leases provide for a $\frac{1}{8}$ royalty interest.

Wilcox net interest in production .875000

PRODUCING LEASES POTTAWATOMIE COUNTY, OKLAHOMA

970 J. K. Warren
Oil and Gas lease dated October 27, 1923, from J. K. Warren, et al, Lessor, to J. C. Cooke Oil & Gas Company, Lessee, recorded in Book 10, page 366, covering all interest in
80 acres being N/2 SW/4 Section 23-6N-8E

970-A Lease provides for $\frac{1}{8}$ royalty and is subject to Plan of Unitization, West Asher Wannette Sand Unit, approved by the Corporation Commission of the State of Oklahoma on June 1, 1960, by Order No. 42738, in Cause CD 13645, in which N/2 SW/4 Section 23-6N-3E is designated Tract No. 4, with participation factor of .255886.

EXHIBIT C-1 — Page 27

**PRODUCING MINERALS
POTTAWATOMIE COUNTY, OKLAHOMA**

2598 Dickson Oil Royalty Company

An undivided 1/80 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 NE/4 Section 20-7N-5E

Subject to Oil and Gas leases of record which provide for a 1/8 royalty. Operated as:

1. NE/4 NE/4 — Mary Guinn Lease
2. SE/4 NE/4 — Mary Guinn Lease
3. E/2 SE/4 NE/4 from surface to depth of 4240 feet — Mose Guinn Lease

Wilcox Oil Company has 1/80 of 1/8 net revenue interest.

2600 Dickson Oil Royalty Company

An undivided 3/160 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 NE/4 Section 7-8N-5E

Subject to:

1. Oil and Gas lease dated October 2, 1962 from Wilcox Oil Company, Lessor to J. Harmon Lewis, lessee, recorded in Book 232, page 293, which provides for a 1/8 royalty. In addition to said royalty Wilcox to receive, as bonus, an additional 1/32 of 7/8 of production, proportionately reducable, until Wilcox receives \$100.00 per acre for each royalty acre covered by said lease.
2. Maud Misener-Hunton Unit. See below.

2601 Dickson Oil Royalty Company

An undivided 1/80 interest in and to all the oil, gas and other minerals under: 80 acres being W/2 SE/4 Section 18-8N-5E

Lease subject to:

1. Oil and Gas lease dated January 15, 1924 from E. D. Lindley, et ux, Lessor to John B. McClintock, which provides for a 1/8 royalty.
2. Maud Misener-Hunton Unit. See below

2602 Dickson Oil Royalty Company

An undivided 1/160 interest in and to all the oil, gas and other minerals in and under 80 acres being S/2 NW/4 Section 18-8N-5E

Subject to:

1. Oil and Gas lease dated November 8, 1922, from J. F. Hubbard, Lessor, to A. B. Phillips, Lessee, recorded in Book 10, page 258, provides for a 1/8 royalty.
2. Maud Misener-Hunton Unit. See below

2603 Dickson Oil Royalty Company

An undivided 1/320 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 SE/4 Section 18-8N-5E

Subject to:

1. Oil and Gas lease dated March 5, 1924, from E. D. Lindley, et ux, lessor, to Gypsy Oil Company, Lessee, recorded in Book 48, page 635, provides for a 1/8 royalty.
2. Maud Misener-Hunton Unit. See below

2600-A The Wilcox Oil Company properties shown below are subject to "Plan of Unitization of Maud Misener-Hunton Unit" approved by the Corporation Commission of the State of Oklahoma, February 27, 1963, by Order No. 51168, in Cause C.D. 17886, and all modification and amendments thereto:

File No.	Tract No.	Primary Tract Participation	Secondary Tract Participation
2600	2	.19330%	1.83869%
2601	12	3.18420%	9.72819%
2602	7	7.83029%	7.81501%
2603	13	2.62242%	10.95413%

1570 Harry L. Phillips

An undivided 1/8 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 SE/4 Section 3-8N-4E

Subject to:

1. Oil and Gas lease dated June 14, 1938, from H. F. Wilcox Oil & Gas Company, Lessor, to Helmerich and Payne, Inc. Lessee, providing for a 1/8 royalty, operated as "Roberts Lease", in which Wilcox has a 1/64 net revenue interest.

EXHIBIT C-1 — Page 28

2599 Dickson Oil Royalty Company

An undivided 1/160 interest in and to all the oil, gas and other minerals in and under
80 acres being S/2 NW/4 Section 30-TN-5E

Subject to:

1. Oil and Gas lease dated October 19, 1954, from Wilcox Oil Company, Lessor, to H. E. Reding, lessee, providing for a $\frac{1}{8}$ royalty, operated as "McBride" lease in which Wilcox has 1/160 of 1/8 Net revenue interest.

**PRODUCING MINERALS
SEMINOLE COUNTY, OKLAHOMA**

1569 Nancy Deer

An undivided 5/128 interest in and to all the oil, gas and other minerals in and under or which may be produced from

80 acres more or less, being N/2 NW/4 Section 8-9N-6E

As reflected by conveyances dated October 25, 1926, and November 3, 1926, from C. H. Lebow, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, and recorded in Volume 241, Page 56 & 58.

Said interest is subject to:

1. Oil and Gas lease dated January 8, 1924, from G. W. Frazier, et ux, Lessor, to G. E. Rogers, lessee, recorded in Book 154, Page 505,

Said lease provides for a $\frac{1}{8}$ royalty and is now held by Carter Oil Company.

Net interest in production is .004825

2611 Tommy Wisener

An undivided 1/32 interest in and to all of the oil, gas and other minerals in and under and that may be produced from

40 acres more or less, being SW/4 NE/4 Section 6-9N-6E.

As reflected by conveyance from Dickson Oil Royalty Company, to H. F. Wilcox Oil and Gas Company, dated October 1, 1930, and recorded in Volume 440, Page 110.

Said interest is subject to:

1. Lease in Favor of Sands Petroleum Company and Burke-Greis Oil Company, dated April 10, 1924, recorded in Volume _____, Page _____

Net interest in production is .003906

2612 J. M. Smith

An undivided 1/80 interest in and to all of the oil, gas and other minerals in and under and that may be produced from

80 acres more or less, being W/2 NE/4 Section 5-7N-7E

As reflected by conveyance dated October 1, 1930, from Dickson Oil Royalty Company, Grantor, to H. F. Wilcox Oil and Gas Company, recorded in Book 440, Page 104.

Said interest in production is subject to:

1. Oil and Gas lease dated December 7, 1922, from J. M. Smith, et ux, Lessor to Cosden Oil and Gas Company, recorded in Book 122, Page 466. Said lease provides for a $\frac{1}{8}$ royalty and is now owned by Sunray Mid-Continent Oil Company.

Net interest in production .0015625

2613 J. D. Shepherd

An undivided 41/10080 interest in and to all the oil, gas and other minerals in and under, and that may be produced from

37.80 acres more or less being the SW/4 NW/4 Section 6-9N-6E

As reflected by conveyance dated October 1, 1930, from Dickson Oil Royalty Company, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Book _____, Page _____

Said interest is subject to:

1. Oil and Gas lease in favor of Skelly Oil Company.

Net interest in production is .000508

**PRODUCING MINERALS
STEPHENS COUNTY, OKLAHOMA**

2617 An undivided $\frac{3}{8}$ interest in and to oil, gas and other minerals in and under
Lots 11, 12, 17, 18, 19, and 20, being SW/4, Section 12-2S-8W.

949 E. C. Armstrong

An undivided $\frac{2}{5}$ interest in and to the oil, gas and other minerals in and under
W/2 SE/4 Section 8-2S-6W

Subject to oil and gas lease dated May 26, 1950, from Wilcox Oil Company, as Lessor, to E. C. Harlin, Jr., as Lessee, recorded in Book _____, Page _____, providing for $\frac{1}{8}$ royalty subject to:

1. Plan of Unitization for Northwest Palacine Yates Sand Unit, between The Atlantic Refining Company, as Operator, and Beard Oil Company, et al, as non-Operator, covering:
NE/4 SE/4 NE/4 Section 7; SE/4 NW/4 NW/4, SW/4 NE/4 NW/4, S/2 NW/4, SW/4 SW/4
NE/4, N/2 NW/4 SW/4, NE/4 SW/4, NE/4 SE/4 SW/4, W/2 SE/4, SW/4 NE/4 SE/4, W/2
SE/4 SE/4 Section 8-2S-6W, in which Wilcox Oil Company owns a R. I. of .017215%.

**PRODUCING OVERRIDING ROYALTY
STEPHENS COUNTY, OKLAHOMA**

2616 J. M. Shelton

An undivided 133/6144 interest in and to the oil, gas and other minerals in and under
E/2 W/2 SE/4 Section 32-1S-8W

Subject to lease dated January 27, 1916, from J. M. Shelton, et ux, as Lessor, to J. H. Ledbetter, as Lessee, recorded in Book 68, page 34, insofar as said lease covers said E/2 W/2 SE/4, Section 32-1S-8W.

**PRODUCING LEASES
TEXAS COUNTY, OKLAHOMA**

3880 Lola H. Reust

Oil and Gas lease dated December 12, 1940, from Lola Hockett Reust, et al, lessors, to J. W. McCall, Lessee, recorded in Book 231, page 8, covering the following described land.

All interest in 80 acres being E/2 SE/4 Section 22-4N-14ECM and 15/16 interest in 80 acres being
W/2 SE/4 Section 22-4N-14ECM.

Oil and Gas lease dated February 15, 1943, from A. L. Jones, Lessor, to T. B. Roach, Lessee, recorded in Book 233, page 299, covering a 1/16 interest in the following described land.

80 acres being W/2 SE/4 Section 22-4N-14ECM

3881 Inter-State Cattle Co.

Oil and Gas lease dated September 19, 1936, from Inter State Cattle Loan Company, Lessor, to Empire Oil and Refining Company Lessee, recorded in Book 204, page 108, as amended by Instrument dated December 20, 1940, recorded in Book 219, page 585, covering all interest in the following described land.

160 acres being SW/4 Section 22-4N-14ECM

3882 F. M. Vivian

Oil and Gas lease dated October 2, 1944, from F. M. Vivian, et ux, Lessors, to Cities Service Gas Company, Lessee, recorded in Book 255, page 314, covering all interest in the following described land.

160 acres being NW/4 Section 22-4N-14ECM

3883 Jesse D. Hill

Oil and Gas lease dated November 26, 1943, from Jesse D. Hill et ux, Lessors, to Cities Service Oil Company, Lessee, recorded in Book 243, page 271, covering all interest in the following described land.

160 acres being NE/4 Section 22-4N-14ECM

Wilcox Oil Company owns a $\frac{1}{4}$ working interest in each of the above leases, all of which provide for a $\frac{1}{8}$ royalty, and all of which are subject to "Declaration for Unitized Operations", dated January 19, 1945, covering oil and gas produced from Section 22-4N-14E; said leases being further subject to "Agreement" dated February 7, 1945, between Cities Service Gas Company and Wilcox Oil Company, et al, providing for the operations of said Section 22, which is operated as Reust Unit in which Wilcox Oil Company has a $\frac{1}{4}$ working interest and a $\frac{1}{4}$ of $\frac{1}{8}$ Revenue interest.

**PRODUCING MINERALS
WASHITA COUNTY, OKLAHOMA**

1990 Floyd O. Howarth

An undivided $\frac{1}{2}$ interest in all the oil, gas and other minerals in and under
200 acres being S/2 NW/4, W/2 NE/4, NE/4 NE/4 Section 19-10N-20W

Subject to "Elk City Hoxbar Sand Conglomerate Unit", approved by the Corporation Commission of The State of Oklahoma, October 27, 1950, in Cause C.D. No. 2846, Order 24158, as subsequently enlarged, the participating factor for this acreage being .009852248.

EXHIBIT C-1 — Page 30

**PRODUCING LEASES
WOODS COUNTY, OKLAHOMA**

5631 Doris Steffens

Oil and Gas lease dated July 18, 1955, as amended December 7, 1962, from Doris Magney Steffens, et vir, Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 151, page 189, and amendment recorded in Volume 221, page 359, insofar as said lease covers:

160 acres more or less, being SE/4 Section 20-27N-15W

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated January 23, 1963 by and between The Atlantic Refining Company, as Operator, and Wilcox Oil Company, as Non-Operator, covering all of Section 20-27N-15W, containing 640 acres, more or less.
2. Oklahoma Corporation Commission Order No. 50564, dated December 14, 1962, unitizing all of Section 20-27N-15W, containing 640 acres more or less, for the production of gas and gas condensate from the Tonkawa Sand. (The Marcum Gas Unit).

Wilcox Net revenue interest: .218750

**PRODUCING MINERALS
WOODWARD COUNTY, OKLAHOMA**

2129 W. F. Hawk, et ux

An undivided $\frac{1}{2}$ interest in all the oil, gas and other minerals in and under

160 acres being E/2 SE/4 Section 9, NW/4 SW/4 Section 10, NW/4 NW/4 Section 15-23N-18W

2129-A Subject to "Communitization Agreement" dated November 25, 1963, executed by Tenneco Oil Company, et al, recorded in Book 208, page 534, which communitizes gas and gas condensate produced from the Chester Lime Formation under Section 10-23N-18W, and is further subject to "Operating Agreement" dated May 17, 1963, between Tenneco Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering said Section 10 from surface to base of Chester Limestone Formation, Operated as "Essie Hensley Unit", in which Wilcox Oil Company has a .03125 interest.

**PRODUCING MINERALS
OUACHITA COUNTY, ARKANSAS**

2635 Henry Primm

An undivided $\frac{1}{8}$ interest in and to all the oil, gas and other minerals in and under

50 acres being West $\frac{1}{4}$ of the SW/4 SW/4 Section 24-15S-16W; All that part of SE/4 SE/4 Section 23-15S-16W lying on East side of a certain Spring Branch which runs North and South and dividing said tract of land about the center thereof and containing 20 acres more or less.

Said interest is subject to:

1. (a.) Oil and Gas lease dated August 7, 1928, from C. H. Speights, et al, Lessor, to Little Fay Oil Company, Lessee, recorded in Book 62, Page 136.
(b.) Oil and Gas lease dated March 19, 1928, from H. P. Primm, et ux, Lessor, to Little Fay Oil Company, Lessee, recorded in Book 75, Page 627.
2. Unitization Agreement dated April 29, 1960, between Wilcox Oil Company, et al, non-Operators, and Kerr-McGee Oil Industries, Inc., Operator, recorded in Book _____, Page _____, insofar as said unit covers 10 acres more or less being SE/4 SW/4 SW/4 Section 24-15S-16W.

Net interest in production:

1. Non-Unitized area .0156250
2. Unitized area .0078125

2636 Hezekiah H. Goodwin

An undivided $\frac{1}{8}$ interest in and to all oil, gas and other minerals in and under

40 acres being SW/4 SE/4 Section 29-15S-15W, as reflected by conveyance dated October 1, 1930, from John L. Dickson, et ux, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Book 85, Page 564.

Said interest is subject to:

1. Oil and Gas lease in favor of Ohio Oil Company.

Net interest in production is .0156250.

EXHIBIT C-1 — Page 31

**PRODUCING LEASES
BARBER COUNTY, KANSAS**

5657 Caleb Forsyth "A"

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 16, 1946, from Caleb J. Forsyth, et ux, as Lessor, to Magnolia Petroleum Company, as Lessee, recorded in Book 41, Page 623, covering:
80 acres being S/2 SW/4 Section 17-32S-12W

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of 1/16 of 7/8.
2. Operating Agreement dated May 6, 1958, between Pickrell Drilling Company, as Operator, and Magnolia Petroleum Company, as non-Operator, covering S/2 SW/4 Section 17-32S-12W, in which Wilcox Oil Company owns 25.0000% W. I.

Net interest in production in said unit 20.50781%.

5658 Caleb Forsyth "B"

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 16, 1946, from Caleb J. Forsyth, et ux, as Lessor, and Magnolia Petroleum Company, as Lessee, recorded in Book 42, Page 51, insofar as said lease covers:

80 acres being E/2 NW/4 Section 17-32S-12W

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of 1/16 of 7/8.
2. Operating Agreement dated May 6, 1958, between Pickrell Drilling Company, as Operator, and Magnolia Petroleum Company, as non-Operator, covering E/2 NW/4, SW/4 NW/4, NE/4 SW/4, Section 17-32S-12W, in which Wilcox Oil Company owns 12.5000% W. I.

Net interest in production in said unit is 10.253906%.

**PRODUCING LEASES
DECATUR COUNTY, KANSAS**

6343 Anna Miller "A"

Oil and Gas lease dated April 28, 1961, from Anna G. Miller, Lessor, to Rains & Williamson Oil Co., Lessee, recorded in Book 31, page 149, covering all interest in the following described land.

160 acres being SW/4 Section 12-2S-28W

Lease provides for $\frac{1}{8}$ royalty.

Wilcox Oil Company owns a $\frac{1}{4}$ Working Interest.

Lease Subject to:

1. A 1/16 of 7/8 overriding royalty.
2. Operating Agreement dated March 22, 1962, between Murfin Drilling Company, Operator, and Wilcox Oil Company, et al, Non-Operators.

6412 Robert Barratt

Oil and Gas lease dated December 5, 1952 from Robert O. Barratt, et ux, Lessor, to Pack Oil Company, Lessee, recorded in Book 23, page 25, covering all interest in the following described land.

200 acres being E/2 NE/4, NE/4 NW/4, W/2 SE/4 Section 14-2S-28W

Lease provides for $\frac{1}{8}$ royalty.

Wilcox Oil Company owns $\frac{1}{4}$ working interest.

Lease subject to:

1. 1/16 of 7/8 overriding royalty.
2. Operating Agreement dated June 12, 1962, between Murfin Drilling Company, Operator, and Wilcox Oil Company, et al, Non-Operators.

6418 Fred Unger

Oil and Gas lease dated March 21, 1955, from Fred H. Unger et ux, Lessor, to Anderson Prichard Oil Corporation, Lessee, recorded in Book 25, page 450, covering all interest in the following described land.

160 acres being SE/4 Section 25-2S-30W

Lease provides for a $\frac{1}{8}$ royalty.

Wilcox Oil Company owns $\frac{1}{4}$ working interest.

Lease Subject to:

1. 1/16 of 7/8 overriding royalty.
2. Operating Agreement dated October 1, 1962, between Rains & Williamson Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators.

**PRODUCING LEASES
HODGEMAN COUNTY, KANSAS**

5737 Ray Lee

Oil and Gas lease dated April 19, 1956, from Ray Lee, et ux, Lessor to Rains & Williamson Oil Company, Lessee, recorded in Book 10, Page 524, covering all interest in the following described land:
320 acres being S/2 Section 16-22S-22W

Lease provides for $\frac{1}{4}$ royalty and is subject to:

1. Operating Agreement dated July 23, 1962, between Sunray DX Oil Company, Operator, and Wilcox Oil Company, non-Operator, which "pools" the Working Interest in S/2 Section 16 and N/2 Section 21-22S-22W, operated as Edwin Miller Unit and which Wilcox Oil Company has a $\frac{1}{2}$ Working Interest and a $\frac{1}{2}$ of $\frac{1}{8}$ Revenue Interest. All rights and obligations which accrue to Wilcox Oil Company by virtue of said Agreement are included herein. Lease operating designations covered by this agreement are:

5737-A S/2 Section 16-22S-22W, operated as Ray Lee lease.

5737-B NE/4 Section 21-22S-22W, operated as E. Miller Unit.

5737-C E/2 NW/4 Section 21-22S-22W, operated as Emma Lingenfelder lease.

5737-D W/2 NW/4 Section 21-22S-22W, operated as A. Miller Unit.

6572 Maud Armstrong

Oil and Gas lease dated September 19, 1956, from Maud Armstrong, et al, Lessor, to C. N. Bidwell, Lessee, recorded in Book 11, Page 403, covering all interest in the following lands:
320 acres being NW/4, SE/4 Section 15-22S-23W.

Wilcox Oil Company owns $\frac{1}{4}$ Working Interest.

Lease provides for a $\frac{1}{4}$ royalty and is subject to:

1. Operating Agreement dated April 8, 1964, between Mull Drilling Company, Inc., Operator, and Wilcox Oil Company, et al, non-Operator, covering SW/4, W/2 NE/4, SE/4 NE/4, N/2 SE/4 Section 16; NW/4 SW/4, SE/4 Section 15; N/2 Section 22; W/2 Section 23-22S-23W. All rights and obligations accruing to Wilcox Oil Company by virtue of said agreement are included herein.

6635 Gladys Scothorn

Oil and Gas lease dated July 3, 1962, from Raleigh Scothorn, et ux, Lessor, to A. E. Stokes, Lessee, recorded in Book 16, Page 54, covering all interest in the following described land:
160 acres being NE/4 Section 22-22S-23W.

Wilcox Oil Company owns $\frac{1}{4}$ Working Interest.

Lease provides for $\frac{1}{4}$ royalty and is subject to:

1. 1/16 of 7/8 overriding royalty on wells producing less than 35 BOPD and 1/8 of 7/8 overriding royalty on wells producing 35 BOPD or more.
2. Agreement dated January 3, 1964, between Northern Natural Gas Producing Company, et al.
3. Operating Agreement dated April 8, 1964, between Mull Drilling Company, Inc., more particularly described in #6572 above.

5736 Mary Kuhn

Oil and Gas lease dated April 20, 1956, from Mary Emma Kuhn, et al, Lessor, to Rains & Williamson Oil Company, Lessee, recorded in Book 10, Page 523, and Correction lease thereto, dated November 2, 1962, from Gladys M. Kuhn, Lessor, to Wilcox Oil Company, Lessee, recorded in Book 17, Page 80, covering all interest in the following described land:
320 acres being N/2 Section 18-22S-22W.

Lease provides for a $\frac{1}{4}$ royalty.

**PRODUCING LEASES
KINGMAN COUNTY, KANSAS**

5678 Wells-Towner

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated May 14, 1953, from Ruth R. Wells, et al, as Lessor, to Harry McAdams, as Lessee, recorded in Book 66, Page 235, insofar as said lease covers:
W/2 NE/4 Section 17-30S-7W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty equal to $\frac{1}{16}$ of $\frac{7}{8}$.

Net interest in production is 20.50781%.

5673 Cora Gilchrist

All interest in and to Oil and Gas lease dated September 1, 1955, from Cora Gilchrist, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 73, Page 209, covering:

SW/4 SW/4 Section 10; NW/4 NE/4, NE/4 NW/4, 5.00 acres out of NW/4 NW/4 described as beginning at SE corner NW/4 NW/4, North 424.5 feet, West 513.0 feet, South 424.5 feet, East 513.0 feet to place of beginning.

Said lease provides for $\frac{1}{8}$ royalty interest.

Net interest in production is 87.5000%.

5674 John Kinert

All interest in and to Oil and Gas lease dated September 1, 1955, from Clark A. Wallace, Executor & Trustee, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 73, Page 210, covering:

W/2 SE/4, E/2 SW/4, SW/4 NE/4, SE/4 NW/4, Section 15-30S-7W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. Salt water Disposal Agreement dated April 27, 1961, between Wilcox Oil Company and Mull Drilling Company, Inc.
2. Salt water Disposal Agreement dated September 21, 1960, between Wilcox Oil Company and Pure Oil Company.
3. Salt water Disposal Agreement dated January 2, 1958 between National Cooperative Refining Association and Wilcox Oil Company.
4. Declaration of Unitization, dated June 5, 1963, for unit created by State Corporation Commission of Kansas, Order Docket No. 71,222-C (C-10,-159), dated May 1, 1963, covering:
E/2 W/2, W/2 E/2 Section 15-30S-7W.

Net interest in production is 87.5000%.

5444 Barney DeWeese

All interest in and to Oil and Gas lease dated April 9, 1954, from Barney B. DeWeese, et ux, as Lessor, to A. F. Baker, recorded in Book 68, Page 367, covering:

W/2 SW/4 Section 25; N/2 NE/4, NE/4 NW/4 Section 36-29S-7W.

Said lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 87.5000%.

5435 Joe Krehbiel

All interest in and to Oil and Gas lease dated April 9, 1954, from Joe P. Krehbiel, as Lessor, to A. F. Baker, as Lessee, recorded in Book 68, Page 288, covering:

W/2 NW/4, NW/4 SW/4 Section 36-29S-7W.

Said lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 87.5000%.

6226 E. J. Kohman

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated May 5, 1954, from E. J. Kohman, Gdn., as Lessor, to Elmer M. Oak, as Lessee, recorded in Book 68, Page 91, covering:

NW/4, W/2 NE/4, SW/4, SE/4 Section 8-30S-7W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{3}{32}$ of $\frac{7}{8}$ insofar as said lease covers:
NW/4, W/2 NE/4, SW/4, W/2 SE/4 Section 8-30S-7W.

Net interest in production is 19.824218%.

5769 Leo Cox

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated September 26, 1953, from Leo V. Cox, et ux, as Lessor, to Southwest Grease and Oil Company, Inc., as Lessee, recorded in Book 66, Page 437, covering: S/2 Section 19-29S-6W; E/2 SE/4 Section 24-29S-7W.

Said lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 21.8750%.

6402 Maple "G"

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 1, 1953, from J. H. Maple, et ux, as Lessor, to A. F. Baker, as Lessee, recorded in Book 67, Page 489, covering:

W/2 NW/4, W/2 NE/4, E/2 SE/4 Section 30-29S-6W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{1}{16}$ of $\frac{7}{8}$.

Net interest in production is 20.50781%.

6297 Jessie Matson

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated July 1, 1961, from Jessie W. Matson, et al, as Lessor, to Elmer M. Oak, as Lessee, recorded in Book 95, Page 70, covering:

E/2 W/2 Section 31-29S-6W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{1}{16}$ of $\frac{37}{48}$ of $\frac{7}{8}$.
2. Declaration of Unitization dated January 5, 1962, between Pickrell Drilling Company, Phillips Petroleum Company, Walters Drilling Company and the Pure Oil Company.
3. Operating Agreement dated December 18, 1961, between Pickrell Drilling Company, as Operator, and Phillips Petroleum Company, et al, as non-Operator, covering:
W/2 Section 31-29S-6W, in which Wilcox Oil Company owns 12.5000% W. I.

Net interest in production in said lease is 10.41563%.

PRODUCING MINERALS GREENWOOD COUNTY, KANSAS

2632 Herbert A. Patterson

An undivided $\frac{1}{16}$ interest in and to the Oil, Gas and other minerals in and under SW/4 Section 22-23S-11E

Said above interest subject to:

1. Oil and Gas lease to Phillips Petroleum Company of record providing for $\frac{1}{8}$ royalty.
2. Community Agreement dated February _____, 1940, between Phillips Petroleum Company, et al covering SE/4 SW/4 Section 22-23S-11E.
3. Unitization Agreement dated _____, 1950, between Phillips Petroleum Company, et al, as Lessee, and Wilcox Oil Company, et al, as Royalty owners, covering SW/4 Section 22; SE/4, E/2 SW/4, Section 21; NW/4 Section 27; NE/4 Section 28-23S-11E, in which Wilcox Oil Company owns 0.7046% of $\frac{1}{8}$ R. I.

**PRODUCING LEASES
RENO COUNTY, KANSAS**

2060 F. F. Neufeld

A. Oil and Gas lease dated December 28, 1928 from F. F. Neufeld, et ux, Lessor to Joe Harp, Lessee, recorded in Volume 13, at page 274 of the records of Reno County, Kansas, insofar as said lease covers:
160 acres, more or less, being NW/4 (except railroad right-of-way) Section 12-28S-4W

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Assignment from Wilcox Oil Company to Beaver Oil Corp. of all the interest of Wilcox in the lease as to the N/2 of NW/4; and wherein Wilcox reserved a variable overriding royalty depending on potential (now 1/16 and conveyed herein by part B below).
- 2060-A 2. Salt Water Disposal Agreement dated July 1, 1963, between Wilcox Oil Company and Drillers Production Company, Inc., all rights and obligations accruing to Wilcox Oil Company by virtue of said agreement are also herein included.

Wilcox net interest in production .875000*

*Note that net interest shown does not reflect certain royalty interests in SE/4 NW/4 and SW/4 NW/4 acquired in due course by Wilcox and conveyed in the portion of this schedule covering royalties and mineral interests (See #2060 in that category)

B. A 1/16 overriding royalty interest on production from N/2 NW/4 reserved by Wilcox in assignment enumerated in (1) above.

3106 C. V. Montford "C"

Oil and Gas lease dated July 28, 1928 from C. V. Montford and wife, Lessors, to Tidal Oil Company, Lessee, recorded in volume 8, page 189 of the records of Reno County, Kansas, insofar as said lease covers:

10 acres, more or less, being NW/4 NW/4 SW/4, Section 12-28S-4W

Lease provides for a $\frac{1}{8}$ royalty.

Wilcox net interest in production .875000

**PRODUCING MINERALS
RENO COUNTY, KANSAS**

2060 F. F. Neufeld

An undivided 1/320 interest in all oil, gas and other minerals produced from the following described property by virtue of Deed dated July 22, 1949 from J. I. Gallaher, Grantor to Wilcox Oil Company, Grantee, recorded in Volume 38, page 68 of the records of Reno County, Kansas:

40 acres being SW/4 NW/4 Section 12-28S-4W

Wilcox interest acquired thereunder 1/320*

*Note the premises are subject to a lease now held by Wilcox, conveyed under the above #2060 in the portion of this schedule covering leasehold interests.

2060 F. F. Neufeld "A"

An undivided 1/640 interest in all oil, gas and other minerals produced from the following described property, by virtue of Deed dated September 29, 1942 from Lena Cook, Grantor to Wilcox Oil and Gas Company, Grantee, recorded in volume 59, page 521 of the records of Reno County, Kansas.

80 acres being SE/4 NW/4, SW/4 NW/4 Section 12-28S-4W

Wilcox net interest acquired thereunder 1/640*

*Note premises are subject to a lease now held by Wilcox, conveyed under above #2060 in the portion of this schedule covering leasehold interests.

**PRODUCING MINERALS
RUSSELL COUNTY, KANSAS**

1684 C. F. Baldwin

An undivided $\frac{1}{8}$ interest in and to the oil, gas and other minerals in and under
SW/4 Section 16-12S-15W

The above interest is subject to:

1. Oil and Gas lease dated July 3, 1958, from Wilcox Oil Company, as Lessor, to V-Do Oil Company, as Lessee, recorded in Book _____, Page _____, providing for $\frac{1}{8}$ royalty.

EXHIBIT C-1 — Page 36

**PRODUCING LEASES
SEDGWICK COUNTY, KANSAS**

5539 John Hay

An undivided $\frac{1}{2}$ interest in and to oil and gas lease dated October 8, 1954 from John J. Hay, et ux, Lessors, to Southwest Grease and Oil Company, Lessee, recorded in Book M-327, page 415, of the records of Sedgwick County, Kansas, insofar as said lease covers
80 acres, more or less, being N/2 NW/4 of Section 86-28S-1W

Said lease provides for a $\frac{1}{8}$ royalty, and is subject to:

1. Operating Agreement dated February 24, 1955, between Southwest Grease and Oil Company, Inc., et al, and Wilcox Oil Company.

Wilcox Net interest in production .437500

5540 Mary E. Brown

Undivided $\frac{1}{2}$ interest in Oil and Gas lease dated October 20, 1954, from Mary E. Rogers Brown, et vir, Lessors and F. H. Unruh, Lessee, recorded in Book M-328, page 275, of the records of Sedgwick County, Kansas, insofar as said lease covers
80 acres more or less, being S/2 NW/4 of Section 86-28S-1W

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated February 24, 1955 between Southwest Grease and Oil Company, Inc., et al, and Wilcox Oil Company.

Wilcox Net interest in production .437500

5743 Elmer Huffman

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated November 5, 1954 from Elmer E. Huffman et ux, Lessors to Southwest Grease and Oil Company, Inc., Lessee recorded in Volume M-330, page 68, of the records of Sedgwick County, Kansas, insofar as said lease covers.
160 acres being Lots 3 and 4 and the E/2 SW/4 (also described as the SW/4) of Section 18-29S-1E

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of 1/16 of 7/8.
2. Gas Purchase Contract with Cities Service Gas Company dated April 14, 1956.
3. Operating Agreement between Shawver-Armour and Wilcox Oil Company.

Wilcox Net interest in production .205078 W. I.

5744 R. M. Jones

Undivided $\frac{1}{2}$ interest in Oil and Gas lease dated February 25, 1956, from Ransom M. Jones, et ux, Lessors, to Shawver Armour, Inc., Lessee, recorded in Book M-365, page 413, of the records of Sedgwick County, Kansas, insofar as said lease covers:
80 acres, more or less, N/2 NW/4 Section 19-29S-1E

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty of 1/16 of 7/8
2. Gas Purchase Contract with Cities Gas Company, dated April 14, 1956.
3. Operating Agreement between Shawver Armour and Wilcox Oil Company.

Net interest in production .410156 W. I.

**PRODUCING LEASES
SUMNER COUNTY, KANSAS**

6107 Seydell

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated September 10, 1957, from Margaret Seydell and Ernest Seydell, Lessors, to Shawver-Armour, Inc., Lessees, recorded in Volume 6 (photo), Page 376, insofar as said lease covers:

SE/4 Section 17-30S-1E

Lease provides for a 23/128 royalty interest and is subject to:

1. Operating Agreement dated September 1, 1963, between Wilcox Oil Company, Operator, and Sam P. Wallingford, Inc., et al, covering SE/4 Section 17-30S-1E.

Wilcox net interest in production is 25% of 815/884.

6108 Florence Downs

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated May 11, 1955, from Florence E. Downs, et al, as Lessor, to Pack Oil Company, as Lessee, recorded in Book O-55, Page 19, insofar as said lease covers:
S/2 NE/4 Section 20-30S-1E

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated September 1, 1963, between Wilcox Oil Company, Operator, and Sam P. Wallingford, Inc., et al, covering S/2 NE/4 Section 20-30S-1E.

Wilcox net interest in production is 25% of .875000.

6142 Elizabeth Costin

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated August 28, 1957, from Elizabeth A. Costin and Anna Costin, Lessors, to B. O. Hollett, Lessee, recorded in Book 6 (photo), Page 211, insofar as said lease covers:

W/2 SE/4 Section 8-30S-1E

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Outstanding overriding royalty of 1/16 of 7/8.
2. Drilling Agreement dated May 21, 1959, between Wilcox Oil Company, Operator, and Southwest Production Company, et al, as to the leased acreage.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16 of 7/8.

6160 Raymond Markley

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 8, 1957, from Raymond Markley, et al, Lessor, to Pack Oil Company, Lessee, recorded in Volume 4 (photo), Page 186, insofar as said lease covers:

W/2 SE/4 Section 22-30S-1E.

Lease provides for a $\frac{1}{8}$ royalty interest subject to:

1. Outstanding overriding royalty interest of 1/16 of 7/8.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16.

6183 Richard Waggoner

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated December 9, 1958, from Delvia Waggoner, as Gdn. for R. L. Waggoner, Lessor, to Shawver-Armour, Inc., Lessee, recorded in Volume 23 (photo), Page 180 insofar as said lease covers:

E/2 SE/4 Section 22-30S-1E.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Outstanding overriding royalty interest of 1/16 of 7/8.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16 of 7/8.

6189 William Bailey

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated September 23, 1953, from Theta Bailey, et vir, Lessor, to Magnolia Petroleum Company, Lessee, recorded in Volume 38, Page 245 of the records of Sumner County, Kansas, insofar as said lease covers:

SW/4 Section 23-30S-1E.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Outstanding overriding royalty of 1/16 of 7/8.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16 of 7/8.

EXHIBIT C-1 — Page 38

**PRODUCING LEASES
KINGFISHER COUNTY, OKLAHOMA**

5980 Isol Walker
The following described Oil and Gas Leases:

Lessor	Lessee	Date	Recorded		Interest
			Book	Page	
Isol Walker et vir	Wilcox Oil Company	4-12-57	167	518	1/8
Otha J. Acre et al	Wilcox Oil Company	4-12-57	167	520	3/8
James S. Acre et al	Wilcox Oil Company	4-12-57	167	522	1/8
Ben E. Acre et ux	Wilcox Oil Company	4-12-57	167	524	1/8
Nellie Bredbeck et vir	Wilcox Oil Company	4-12-57	167	526	1/8
Frona George et al	Wilcox Oil Company	4-12-57	167	528	2/40
Helen Gomer et vir	Wilcox Oil Company	4-12-57	167	530	1/40
John P. Acre et ux	Wilcox Oil Company	4-12-57	168	610	1/40
Ella Keller et vir	Wilcox Oil Company	4-12-57	228	142	1/40

Said leases covering 160 acres, being all of the SE/4 Section 8-19N-8W.

Said leases provide for a $\frac{1}{8}$ royalty and Wilcox net interest in production is .87500

5946 Ann Felder
Oil and Gas lease dated February 14, 1957 by and between Ann C. Felder, a femme sole, as Lessor, and L. O. Ward, as Lessee, recorded in Book 165, page 9, covering all interest in 160 acres being all of the SE/4 Section 27-19N-6W

Said lease provides for a $\frac{1}{8}$ royalty.

Wilcox Net interest in production is .87500

5947 John Felder
Oil and Gas lease dated February 14, 1957, by and between John C. Felder et ux, as Lessor and L. O. Ward, as Lessee, recorded in Book 165, page 7, covering all interest in 160 acres being SW/4 Section 35-19N-6W

The lease provides for $\frac{1}{8}$ royalty.

Wilcox owns .87500 net revenue interest.

6446 Cities Service Petroleum Company
An undivided 4.22768% interest in and to the following described oil and gas leases in favor of Calvert Exploration Company, as Lessee:

Lessor	Date	Lease Description	Recorded	
			Book	Page
Foster Petroleum Corporation	4-18-62	S/2 SW/4 Section 1-18N-9W	228	120
Cities Service Petroleum Company	6- 1-62	S/2 SW/4 Section 1-18N-9W	232	137
Foster Petroleum Corporation	4-18-62	NW/4 & NW/4 SW/4 Section 35-19N-9W	228	118
Cities Service Petroleum Corporation	6- 1-62	NW/4 & NW/4 SW/4 Section 35-19N-9W	232	135
Foster Petroleum Corporation	4-18-62	NW/4 Section 36-19N-9W	228	122
Cities Service Petroleum Company	6- 1-62	NW/4 Section 36-19N-9W	232	139

(The above leases call for excess royalties as per leases)

6337 Fern Nelson
An undivided 4.22768% interest in and to the following described Oil and Gas leases:

Lessor	Date	Lease Description	Recorded	
			Book	Page
W. H. Nelson et al	6-28-61	Lots 1, 2, 3, 4 and S/2 N/2 (Also known as N $\frac{1}{2}$) of Section 1-18N-9W	211	591
Louise Bradley, a widow	6-29-61	Lots 1, 2, 3, 4 and S/2 N/2 Section 1-18N-9W	211	589
W. A. Burton, Jr. et ux	6-27-61	S/2 NE/4 & S/2 NW/4 and Lots 1, 2, 3, 4, all in Section 1-18N-9W, excepting a proportionate $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty reserved by the lessors on all production	212	284

EXHIBIT C-1 — Page 39

E. S. Hitt	6-11-57	S/2 SE/4 Section 35-19N-9W, excepting a proportionate 1/16 of 7/8 of all oil production and a proportionate 1/8 of 7/8 of all gas production previously reserved by W. O. Allen	169	204
W. O. Allen	6- 9-61	S/2 SE/4 Section 35-19N-9W, excepting a proportionate 1/16 of 7/8 of all oil production and a proportionate 1/8 of 7/8 of all gas production reserved unto lessor	—	—
W. A. Burton, Jr.	6-27-61	S/2 SE/4 Section 35-19N-9W excepting 1/16 of 7/8 of all oil and gas production reserved unto lessor.	212	29

6463 Wm. S. Bailey, Jr.

An undivided 3.96079% interest in and to that certain Oil and Gas Lease dated July 23, 1962, by and between Wm. S. Bailey, Jr., Lessor and Calvert Exploration Company, Lessee, insofar as it covers W/2 SW/4 Section 36-19N-9W

Subject to a proportionate part of 1/16 of 7/8 overriding royalty interest reserved by the Lessor on all production, said override pertaining only to Lessor's interest in said land.

The above lease Numbers 6446, 6337 & 6463 are subject to:

1. Basic operating Agreement dated September 26, 1961, as amended, between Calvert Exploration Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering all of Sections 1 and 2, Township 18N, Range 9 W and all of Section 35 and 36-19N-9W which agreement provides for basic interest of parties in area covered. (Wilcox participation .0396079)
2. Communitization Agreement dated June 4, 1963 between Wilcox Oil Company, et al, and certain named royalty and mineral owners, forming River Unit #1 covering the NE/4 of Section 2-18N-9W. (Net Revenue Int. .0340245)
3. Communitization Agreement dated June 4, 1963 by and between Wilcox Oil Company, et al, and certain named royalty owners, communitizing the SE/4 of Section 35-19N-9W (Hitt Unit) (Net Revenue Interest .0332367)
4. Pooling Agreement dated June 3, 1963, between Wilcox Oil Company, et al, and certain named royalty and mineral interest owners pooling the SW/4 of Section 35-19N-9W (Nelson Unit)
5. Communitization Agreement dated January 3, 1964, between Wilcox Oil Company, et al, and certain named Royalty and mineral interest owners communitizing all of Section 35-19N-9W (Bertie Gas Unit) (Net Revenue Interest .0334829)
6. Overriding royalties of record.

NET REVENUE INTEREST

1. River Unit #1
(NE/4 Section 2-18N-9W) .0340245
2. Hitt Unit
(SE/4 Section 35-19N-9W) .0332367
3. Bertie Gas Unit
(All of Section 35-19N-9W) .0334829
4. Bertie Oil Unit
(S/2 NW/4 Section 35-19N-9W) .0323449
5. Nelson Unit
(SW/4 Section 35-19N-9W) .0396079 Gross Participation
6. Blodgett Unit
(All of Section 2-18N-9W) .0396079 Gross Participation
7. All of Section 35 & 36-19N-9W and Section 1- & 2-18N-9W not covered by above special Units. .0396079 Gross Participation

**PRODUCING MINERALS
KINGFISHER COUNTY, OKLAHOMA**

2545 Joseph S. Choat #1

An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
Lots 1, 2, 3 and 4; S/2 N/2 Section 1-18N-9W

The above interest subject to:

1. Operating Agreement dated September 26, 1961, between Calvert Exploration Company, as Operator, and Wilcox Oil Company, as non-Operator, covering Section 1 and 2-18N-9W and Section 35 and 36-19N-9W, in which Wilcox Oil Company owns 3.96079% W. I.

Net interest in production due to the above mineral interest is 3.1250%.

2546 Joseph S. Choat #2

An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
S/2 Section 26-19N-9W

The above interest subject to:

1. Operating Agreement dated July 26, 1963, between Calvert Exploration Company, as Operator, and Wilcox Oil Company, et al, as non-Operator, covering S/2 Section 26-19N-9W, in which Wilcox Oil Company owns 25.0000%

Net interest in production from said unit due to the above mineral interest is 25.0000%.

**PRODUCING OVERRIDING ROYALTY
LAFOURCHE PARISH, LOUISIANA**

3142 Adrien Lefort

An undivided $\frac{1}{128}$ of $\frac{8}{8}$ interest in and to the oil, gas and other minerals being $\frac{1}{8}$ of $\frac{8}{8}$ overriding royalty as reserved in Assignment, dated June 1, 1940, from H. F. Wilcox Oil & Gas Company to Brown-woods Oil Corporation, less an aggregate of $\frac{12}{128}$ of $\frac{8}{8}$ overriding royalty as conveyed by various Assignments of record.

**PRODUCING MINERALS
CALDWELL COUNTY, TEXAS**

T-70 John L. Dickson

An undivided $\frac{1}{64}$ interest in and to all the oil, gas and other minerals in and under
40 acres being a part of the Jas. Hinds League, being the same land conveyed by Minerva Hinds to B. D. and Montie Sullivan by Deed recorded in Book 13, pages 169-171, Caldwell County Deed records, to which reference is hereby made and is hereby incorporated by reference for a more particular description, also being the same land described in Mineral Deed dated October 1, 1930, John L. Dickson, Grantor, to H. F. Wilcox Oil & Gas Company of Texas, Grantee, recorded December 1, 1930, reception No. 3247, records of Caldwell County, Texas.

Subject to Oil and Gas lease dated December 1, 1926, from T. A. Tiller, Lessor, to T. N. Smith, Lessee, recorded in Volume 114, page 550, providing for a $\frac{1}{4}$ royalty, operated as T. A. Tiller lease, Wilcox has a $\frac{1}{64}$ of $\frac{8}{8}$ net revenue interest.

**PRODUCING LEASES
CLAY COUNTY, TEXAS**

3707 George W. Scaling

Oil and Gas lease dated September 28, 1943, from George W. Scaling, et al, lessor, to R. Olsen Oil Company, Lessee, recorded in Volume 140, page 553, as amended by instrument dated December 7, 1948, recorded in Volume 167, page 297, covering all interest in the following described land:

Tract 1: 702.50 acres being the East 702.50 acres in a rectangle shape out of the J. Gamble Survey, Abstract 168.

Tract 2: A strip of land in Section 13, lying between Section 14 and the Gamble Survey, containing 5.9 acres.

Tract 3: Section 16, containing 11.6 acres, lying between Section 15 to the East and the Gamble and Wilson Survey to the West.

Tract 4: The North 320 acres of Section 15, H.T. & B RR Co., Survey, Abstract 217.

Tract 5: The South 320 acres of the W. A. Graham Survey, Section 14, Abstract 915, being all of Section 14 not leased to Continental Oil Company as of September 28, 1943.

Tract 6: The West 80 acres of the S/2 of Section 15, H.T. & B Survey, Abstract No. 217.

(Subject to releases and assignments of record, which Wilcox Oil Company may have executed covering part of the Lands included in said lease)

Wilcox Oil Company owns a $\frac{1}{4}$ working interest in all depths under tracts 1, 2, 3, 4, 5 and 6, except in 160 acres being S/2 NW/4, E/2 SW/4 Section 15, H. T. & B Survey, Abstract No. 217 (said exception being out of Tracts 5 and 6) in which acreage Wilcox owns a $\frac{1}{4}$ working interest below the depth of 5794 feet, and under which Wilcox owns the following overriding royalty interest from the surface of the earth to the depth of 5794 feet:

1. 2.050781250% until certain Deed of Trust liens affecting the interest of R. Olsen Oil Company have been satisfied and released.
2. 1.875000% after said liens have been satisfied and released until final liquidation of "the R. Olsen \$1,000,000.00 production payment."
3. 2.050781250% thereafter; said overriding royalty interest being more particularly described in "Partial and Conditional Assignment" dated December 19, 1955, from Wilcox Oil Company, et al, to W. B. Omohundro, recorded in Vol 200, page 459.

Lease provides for $\frac{1}{8}$ royalty and is subject to:

1. Casinghead Contract dated November 1, 1950.
2. Agreement dated October 8, 1943, between R. Olsen Oil Company and H. F. Wilcox Oil and Gas Company.
3. Operating Agreement dated December 9, 1943, between Continental Oil Company, Operator, and H. F. Wilcox Oil & Gas Company, et al, Non-Operators.

**PRODUCING MINERALS
COKE COUNTY, TEXAS**

4777 John L. Redfern

An undivided 7/1024 interest in and to all the oil royalty, gas royalty, royalty in casinghead gas, gasoline and royalty in other minerals in and under and that may be produced and mined from the following described land.

572.80 acres being out of Survey or Section 459, Block 1-A, H & TC RR Co. Survey, Abstract No. 394, described by metes and bounds: said land being that land described in Royalty Deed dated February 8, 1951, from John J. Redfern, Jr., Grantor, to Wilcox Oil Company, Grantee, recorded in Volume 95, page 175, records of Coke County, Texas, reference to said Deed hereby being made, and the description therein is hereby incorporated by reference.

This is a term royalty interest for a period of 20 years from March 26, 1947, and as long thereafter as production is obtained in paying quantities.

Subject to Oil and Gas lease dated June 22, 1944, from C. E. Mathers, et ux, Lessor, to O. W. Greene, Lessee, recorded in Volume 64, page 585, which provides for a $\frac{1}{8}$ royalty.

Subject to "Royalty Owners Unitization Agreement, Jameson Reef Unit; dated October 31, 1950, Sun Oil Company, Operator, in which this acreage was designated Tract 13, with net tract participation in unit being 14.800691% (Net tract participation in unit now being 12.592277%).

PRODUCING MINERALS DUVAL COUNTY, TEXAS

T-78 John L. Dickson

An undivided $\frac{1}{8}$ interest in and to all the oil, gas and other minerals in and under 1024.00 acres being the Land described in Mineral Deed dated December 1, 1936, from H. F. Wilcox Oil & Gas Company of Texas to H. F. Wilcox Oil & Gas Company, recorded December 17, 1936, No. 3075, reference to said Deed hereby being made and the description in said Deed is hereby incorporated by reference.

Subject to Oil and Gas leases of record in which Wilcox Oil Company has a $\frac{1}{8}$ of $\frac{1}{8}$ net revenue interest.

PRODUCING MINERALS ECTOR COUNTY, TEXAS

4498 Agnes S. Nicholls

An undivided $\frac{7}{2560}$ interest in and to all the oil, gas and other minerals in and under 669.3 acres being Section 8, Block 42 Township 2 South, Texas and Pacific Railway Company Survey.

Subject to Oil and Gas leases of record which provide for a $\frac{1}{8}$ royalty, operated as H. C. Foster, H. C. Foster "B", H. C. Foster "C" and H. C. Foster "D" leases in which Wilcox has a $\frac{7}{2560}$ of $\frac{1}{8}$ net revenue interest.

PRODUCING LEASES GRAY COUNTY, TEXAS

T-34 Phebe Lease

Oil and Gas lease dated May 20, 1927 from Phebe A. Worley, widow, and Albert Combs, Lessors, to H. F. Wilcox Oil & Gas Company, as Lessee, recorded in Volume 84, page 522, insofar as said lease covers:

30.1 acres out of Survey 40, located in Block 3 of the I & G.N. RR Co., Grant.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Agreements of 1957 wherein Wilcox acquired all but $\frac{3}{56}$ of the $\frac{7}{8}$ working interest outstanding in the lessors by virtue of an agreement of May 20, 1957, wherein the Lessors reserved a $\frac{1}{2}$ of $\frac{1}{8}$ working interest.

Wilcox Net Interest in production $\frac{53}{56}$ of $\frac{7}{8}$.

6204 Inez Carter

The following Oil and Gas leases insofar as they cover the following described land in Gray County, Texas.

SW/4 of Section 84, Block 3, I&GN RR Co., Survey, containing 160 acres more or less.

Lease	Date	Lessor	Lessee	Recordation	Interest
a	3-11-60	Inez Carter et al	Wilcox Oil Co.	Vol. 232 Page 179	$\frac{7}{8}$
b	3-11-60	Socony Mobil Oil Co.	Wilcox Oil Co.	Vol. 233 Page 94	$\frac{1}{8}$

Each of the above leases provide for a $\frac{1}{8}$ royalty interest and are subject to:

1. Additional $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty interest in lessors by virtue of lease provision

Wilcox net interest in production $\frac{15}{16}$ of $\frac{7}{8}$

T-3 Wilcox-Worley

Oil and Gas lease dated December 21, 1923 from Phebe A. Worley, widow, and E. A. Reynolds, et ux, Lessors to F. W. Dilliard, Lessee, recorded in Volume 2 at page 156 of the records of Gray County, Texas, insofar as said lease covers:

All of Section 62 and W/2, N/2 NE/4, SE/4 NE/4, E/2 SE/4, SW/4 SE/4 Section 61; NE/4 Section 84, All in Block 3, I & G.N. RR Co. Survey

Lease provides for a $\frac{1}{8}$ royalty

Wilcox Net interest in production .875000

T-4 Wilcox Combs

Oil and Gas lease dated December 21, 1923 from Phebe Worley, widow and Albert Combs, Lessors, to F. W. Dilliard, Lessee, recorded in volume 2, page 155 of the records of Gray County, Texas, insofar as said lease covers:

W/2 Section 35; E/2 Section 37; W/2 Section 38; E/2 SW/4 Section 39; W/2 NE/4 Section 58; All of Section 59 and All of Section 60, in Block 3, I&GN RR Co., Survey.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Casinghead Gas Contract dated December 14, 1955 as amended between Sinclair & Phillips Petroleum Company.

Wilcox net interest in production .875000

EXHIBIT C-1 — Page 43

**PRODUCING MINERALS
GRAY COUNTY, TEXAS**

T-1 T. B. Haggard

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
W/2, Survey 112, Blk 3, I&G. N. Ry. Survey

The above interest is subject to:

1. Oil and gas lease, dated August 19, 1925, from T. B. Haggard, et ux, as lessor, to Roxana Petroleum Corporation, as Lessee, recorded in Book 2, page 314, covering NW/4 Section 12, Blk 3, I&G.N. RR Company Survey, and oil and gas lease dated October 24, 1924, from T. B. Haggard, et ux, as Lessor, to R. R. Osborne, as Lessee, recorded in Book 2, page 297, covering SW/4 Section 112, Blk 3, I&GN RR Company Survey. Both of the foregoing leases provide for $\frac{1}{4}$ royalty.
2. Unit Agreement for Southwest Pampa Dolomite Unit, dated February 9, 1962, between Cities Service Oil Company, as Operator, and Gulf Oil Corporation, et al, as Non-Operator, insofar as said Unit covers NW/4 Section 112, Blk 3, I&GN RR Co., Survey.

Net interest in production from said Unit 0.42558%

T-66 J. H. Palmer

An undivided $\frac{1}{28}$ interest in oil, gas and other minerals in and under
Survey No. 31, Blk B-2 H&GN Survey

Said interest is subject to:

1. Oil and Gas lease dated June 26, 1924, from J. H. Palmer, et ux, as Lessor, to Parish, Watts, Collins & Crosby, as Lessee, recorded in Book 1, page 459, covering West 200 acres, Section 31, Blk B-2, H&GN RR Co., providing for a $\frac{1}{4}$ royalty.
2. Oil and Gas lease dated March 11, 1926, from J. H. Palmer, et ux, as Lessor, to Phillips Petroleum Company, as Lessee, recorded in Book 3, page 1, covering East 83.14 acres Survey 31, Blk B-2, providing for $\frac{1}{4}$ royalty.

T-75 G. H. Saunders #2

An undivided $\frac{7}{2560}$ interest in and to the oil, gas and other minerals in and under
SW/4 Section 4, Blk 1, A. C. H. & B Survey

Said interest being subject to:

1. Oil and Gas lease of record to Skelly Oil Company providing for $\frac{1}{4}$ royalty.

T-76 G. H. Saunders #3

An undivided $\frac{1}{1280}$ interest in and to the oil, gas and other minerals in and under
NW/4 Section 4, Blk 1, A.C.H.&B Survey

Said interest is subject to:

1. Oil and Gas lease dated January 26, 1926, from G. H. Saunders, as Lessor, to Magnolia Petroleum Company, as Lessee, recorded in Book 29, page 290, covering W/2 NW/4 Section 4, Blk 1, A.C.H. & B. Survey, providing for $\frac{1}{4}$ royalty.
2. Oil and gas lease dated February 19, 1961, from Wilcox Oil Company, as Lessor, to A. T. Parton, as Lessee, recorded in Book _____, page _____, covering E/2 NW/4 Section 4, Blk 1, A. C. H. & B Survey, providing for $\frac{3}{16}$ royalty.

T-77 G. H. Saunders #4

An undivided $\frac{1}{160}$ interest in the oil, gas and other minerals in and under
SW/4, Section 3, Blk 1, A. C. H. & B Survey

Said interest subject to:

1. Oil and Gas lease dated December 13, 1922, from L. O. Saunders, et al, as Lessor, to The Texas Company, as Lessee, recorded in Book 25, page 224, covering among other lands, SW/4 Section 3, Blk 1, A. C. H. & G Survey.

T-78 G. H. Saunders #5

An undivided $\frac{1}{1280}$ interest in and to the oil, gas and other minerals in and under
NE/4 Section 4, Blk 1, A. C. H. & B. Survey

Said interest is subject to:

1. Oil and Gas lease of record to The Texas Company providing for $\frac{1}{4}$ royalty.

T-74 G. H. Saunders #1

An undivided 1/512 interest in and to the Oil, gas and other minerals in and under
SE/4 Section 4, Blk 1, A. C. H. & B Survey

Said interest is subject to:

1. Oil and Gas lease dated January 25, 1926, from G. H. Saunders, et ux, as Lessor, to G. T. Oliver, as Lessee, recorded in Book 2, Page 322, covering E/2 SE/4, Section 4, Blk 1, A. C. H. & B., providing for $\frac{1}{8}$ royalty.
2. Oil and Gas lease dated December 13, 1922, from G. H. Saunders, et ux, as Lessor, to The Texas Company, as Lessee, recorded in Book 25, page 224, covering W/2 SE/4 Section 4, Blk 1, A. C. H. & B. Survey, providing for $\frac{1}{8}$ royalty.

**PRODUCING LEASES
LIPSCOMB COUNTY, TEXAS**

4483 Marie Bechthold

All interest in and to Oil and Gas lease dated March 18, 1949, from Chris H. Bechthold, et ux, as lessor, to Wilcox Oil Company, as Lessee, recorded in Book 64, page 186, covering
800 Acres Being All Section 27; NE/4 Section 61, Blk 10, HT & B RR Co. Survey

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. Unit Designation dated June 12, 1963, executed by Apache Corporation, et al, recorded in Book 101, page 219, and re-recorded in Book 101, page 383, by Ratification recorded in Book 103, page 173, insofar as said lease covers Section 61, Blk 10, HT&B Survey.
2. Operating Agreement dated May 18, 1962, between Apache Corporation, as Operator, and Wilcox Oil Company, as Non-Operator, as amended by instrument dated April 20, 1964 by which Wilcox Oil Company was appointed Operator, covering Section 61, Blk 10, HT&B Survey, insofar as said lease covers NE/4, Section 61, Blk 10, HT&B Survey, in which Wilcox Oil Company owns 25.0000% W. I.

Wilcox net interest in production as to portion of lease subject to (2) above is 21.8750%

Wilcox Net interest in production not subject to (2) above is 87.5000%

**PRODUCING OVERRIDING MINERALS
MONTAGUE COUNTY, TEXAS**

8346 Mabel C. Fleming ORI

A variable overriding royalty interest in oil and gas amounting to 1/8 of 7/8 on flowing wells and 1/16 of 7/8 on pumping wells, created by Assignment dated December 1, 1942, as amended, May 20, 1943, by and between H. F. Wilcox Oil and Gas Company, Assignor, and Charles Million, Assignee, recorded in Book 254, page 170 of the records of Montague County, Texas, insofar as said interest covers

The North 74 acres of a certain tract of land situated in Montague County, Texas, on the waters of the Red River about 19 $\frac{1}{2}$ miles Northeast from the Town of Montague, being Part of the land patented to W. W. Wickliff, Assignee of W. G. Hill; Beginning at a stake in the WBL of the George Dooley Survey from the SEC of W. D. Griffith Survey; thence West with the SBL of said Survey 950 vrs to the NWC of tract herein conveyed; thence South 469 vrs; thence East 100 vrs; thence South 481 vrs; thence East 841 9/10 vrs; thence North 950 vrs to the place of beginning, and containing 148 acres of land, more or less.

Said interest is subject to:

1. Communitization Agreement dated July 14, 1943 between Continental Oil Company, Wilcox Oil Company, et al forming a 86 acre Unit.

Net interest in production:

From flowing wells:	.094113 ORI
From pumping wells:	.047057 ORI

**PRODUCING MINERALS
WARD COUNTY, TEXAS**

4399 Sloan Royalty

All of Wilcox Oil Company's interest (being various fractional interests) in all of Section 16, save and except the SW/2 N/4, located in Block 5, H&TC Ry Survey, Ward County, Texas.

Said interests are subject to:

1. Unitization Agreement for the Shipley Queen Sand Unit, dated March 25, 1955, unitizing entire area covered by Wilcox interest.

Net revenue interest in Unit:

Unit Tract 11 A
Being the W/4 (NW/4): .000211 R. I.
Unit Tract 11B
Being the S/4 (SW/4): .008508 R. I.
Unit Tract 13
Being the E/2 N/4 (E/2 NE/4) .0023567 R. I.
Unit Tract 14
(Being the NW/4 NE/4 & NE/4
NE/4 and SE/4 NE/4, NE/4 SE/4,
SE/4 SE/4, SW/4 SE/4, SE/4
SW/4 & SW/4 SW/4, NW/4 SW/4,
SW/4 NW/4, NW/4 NW/4 & NE/4
NW/4, all in the SE/4 of Section 16):.0005388 R. I.
Unit Tract 15
(Being the SW/4 NE/4 & NW/4
SE/4 & NE/4 SW/4 & SE/4 NW/4
all in the SE/4 of Section 16): .000535 R. I.

**PRODUCING MINERALS
WEBB COUNTY, TEXAS**

T-81 John L. Dickson

An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in and under
80 acres being All of Block Eleven (11) and all of Block Fourteen (14) of Survey No. 753, Abstract
1832, certificate No. 4587 G. G. & S. F. Ry Survey

T-81 John L. Dickson

An undivided $\frac{1}{16}$ interest in and to all the oil, gas and other minerals in and under
80 acres being E/2 SE/4, all of Block 12 and all of Block 13, of Survey No. 753, Abstract No. 1832,
certificate No. 4587, G. C. & S. F.

Subject to Oil and Gas leases of record, which are operated as follows:

1. Block 11, Survey No. 753 — Cole R. Benavides "E" lease. Wilcox net revenue interest $\frac{1}{4}$ of $\frac{1}{4}$
R. I.
2. Block 12 and 13, Survey No. 753 — Lyng R. Benavides "D" lease — Wilcox net revenue interest
 $\frac{1}{16}$ of $\frac{1}{4}$ R. I.
3. Block 14, Survey 753 — Turner R. Benavides "F" lease — Wilcox net revenue interest $\frac{1}{8}$ of $\frac{1}{4}$
R. I.

**PRODUCING MINERALS
UPSHUR COUNTY, TEXAS**

T-82 Sallie King Royalty

An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under, and that may
be produced from the following described land situated in Upshur County, Texas:

Being 60 acres, more or less, being a part of the James Scott Survey, and described in deed from
R. T. Mattox to James King recorded in Volume Y, Page 637 to 638 of the deed records of Upshur
County, Texas, to which reference is hereby made for complete description.

Said mineral interest is subject to:

1. Operating Agreement dated June 22, 1960, between C. H. Lyons, et al, Operators and Wilcox
Oil Company, et al, Non-Operator.
2. Unit Designation dated June 22, 1960, forming a 43.68 acre unit for the production of oil and
associated hydrocarbons (King Crow Unit).
3. Oil Purchase Agreement with Sanlock Oil Company.

Net Interest in Unit: .0572845

Net Interest in area outside of Unit: .500000

EXHIBIT C-2

UNDEVELOPED PROPERTIES UNDER THAT CERTAIN PLAN OF REORGANIZATION DATED MAY 13, 1964, BY AND BETWEEN WILCOX OIL COMPANY, TENNESSEE GAS TRANSMISSION COMPANY AND W X C COMPANY.

STATE OF ARKANSAS COUNTY OF UNION

NON-PRODUCING MINERALS

- 2638 John L. Dickson et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 10 acres being S/2 S/2 NW/4 NW/4, Section 8-16S-15W
- 2637 John L. Dickson et ux: An undivided $\frac{1}{64}$ interest in and to the oil, gas and other minerals in and under 20 acres being W/2 NW/4 SW/4 Section 11-17S-14W

STATE OF MISSISSIPPI COUNTY OF CARROLL

NON-PRODUCING MINERALS

- 3262 R. C. Fain: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 306.50 acres being all that part of the E/2 SW/4 lying South of Big Sand Creek, S/2 SW/4 SW/4 Section 11, NW/4, E/2 SW/4, W/2 W/2 SE/4 Section 14-19S-3E
- 3263 R. C. Fain: an undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 140.00 acres being N/2 NE/4, SE/4 NE/4 Section 36-20N-3E, SW/4 NW/4 less 22.00 acres off of East side, Section 31-20N-4E
- 3264 R. C. Fain: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 50.00 acres being NE/4 NW/4, 10.00 acres off the North end of SE/4 NW/4 Section 36-20N-3E

NON-PRODUCING LEASES ROOSEVELT COUNTY, MONTANA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5659	10-18-54	Nancy Kennedy Standing — Contract #14-20-256-804	All interest in 40.00 acres being NE/4 SE/4 Sec. 1-27N-52E	—	—
5660	10-18-54	Julia Foote Red Feather Walker —Contract #14-20-256-805	All interest in 311.85 acres being Lots 1, 2, E/2 NW/4 & NE/4 Sec. 18-28N-53E	—	—

STATE OF MONTANA COUNTY OF SWEET GRASS

NON-PRODUCING MINERALS

- 3894 John G. Ellinghausen et ux: An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in and under 400.00 acres being lots 1, 2, 3, S/2 NE/4, SE/4 NW/4, E/2 SW/4, W/2 SE/4 Section 1-1N-14E

NON-PRODUCING LEASES DUNDY COUNTY, NEBRASKA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6292	7- 3-61	Walter C. McBride et ux	All interest in 160.00 acres being SW/4 Sec 13-4N-37W	X	135

**NON-PRODUCING LEASES
FRONTIER COUNTY, NEBRASKA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6251	7-30-60	Zelma Bose et ux	All interest in 320.00 acres being E/2 NW/4, NE/4, E/2 SE/4 Section 19-5N-25W	21	712
6253	7-27-60	Roy Burton et ux	All interest in 320.00 acres being NW/4 Section 29, E/2 NE/4, N/2 SE/4 Section 30-8N-29W	21	668
6254	7-27-60	George S. Willford et ux	All interest in 160.00 acres being NW/4 Section 12-7N-29W	21	711
6255	8- 4-60	W. L. Stubblefield	All interest in 400.00 acres being NW/4, W/2 SE/4 Section 26, NE/4 NE/4 Section 20, N/2 NW/4, SE/4 NW/4 Section 21-7N-25W	22	13
6257	8- 5-60	James Hazen	All interest in 160.00 acres being W/2 NE/4, E/2 NW/4 Section 8-7N-26W	22	14
6260	6-26-60	Charles A. Ramels et ux	All interest in 320.00 acres being NE/4, E/2 NW/4 Section 13, S/2 SE/4 Section 12-6N-29W	21	666

**NON-PRODUCING LEASES
FURNAS COUNTY, NEBRASKA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6261	6-29-60	Guy E. Fetters et ux	All interest in 320 acres being E/2 Section 7-3N-24W	Z	72
6259	8- 2-60	Elmer Peterson et al	All interest in 240 acres being NW/4, W/2 SW/4 Section 18-4N-24W	Z	230

**STATE OF NEW MEXICO
COUNTY OF CHAVES**

NON-PRODUCING MINERALS

- 2547 C. W. Mandler et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 220.00 acres being N/2 Section 9-7S-27E, less and except the West 100.00 acres of the NW/4 Section 9-7S-27E
- 2548 C. W. Mandler et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320.00 acres being E/2 Section 15-7S-28E

**NON-PRODUCING LEASES
SAN JUAN COUNTY, NEW MEXICO**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6121	9-19-57	Navajo Tribe of the Navajo Reservation (Contract # 14-20-600-3532)	$\frac{1}{2}$ interest in 1920.00 acres being Section 9 (Fractional), Section 10 (Fractional), Section 15, Section 16-32N-16W, all land being unsurveyed	—	—

**NON-PRODUCING LEASES
BARBER COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
5329	8-29-63	James J. Swartz et al	All interest in 240 acres in S/2 NW/4 & SW/4 Section 14-34S-10W	111	599
5330	8-29-63	James J. Swartz et al	All interest in 160 acres in S/2 NE/4 & N/2 SE/4 Section 14-34S-10W	111	597

EXHIBIT C-2—Page 2

NON-PRODUCING LEASES CLARK COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5695	2- 7-56	Frank L. Tedford et ux	All interest in 240 acres in SE/4 & E/2 SW/4 Section 35-30S-25W	138	22
5696	2- 7-56	E. E. Tedford, et ux	All interest in 160 acres in NE/4 Section 35-30S-25W	22	139
5697	2- 8-56	Flora J. Abell	All interest in 640 acres in E/2 Section 19 & W/2 Section 20-31S-23W	22	140
5700	2-13-56	May C. Smith, et al	All interest in 320 acres in E/2 Section 7-30S-22W	22	161
5701	2-13-56	May C. Smith, et al	All interest in 160 acres in NW/4 Section 8-30S-22W	22	162
5702	2-13-56	T. W. Cummings, et ux	All interest in 320 acres in N/2 Section 26-30S-24W	22	163
5703	2-13-56	R. E. King, et ux	All interest in 320 acres in S/2 Section 27-30S-24W	22	164
5707	2- 8-56	Dora B. Cleaver, et al	All interest in 400 acres in NE/4 & SW/4 Section 5 and E/2 SE/4 Section 6-31S-23W	22	167
5717	2-28-56	Edna D. Shoyer, et al	All interest in 320 acres in NW/4 & N/2 S/2 Section 16-31S-24W	22	172
5718	2-28-56	Edna D. Shoyer, et al	All interest in 160 acres in SE/4 Section 9-31S-24W	22	173
5720	2-12-56	Maude Ramsey	All interest in 160 acres in SE/4 Section 17-30S-25W	22	183
5721	3-12-56	Dwight P. Jones	All interest in 160 acres in SW/4 Section 16-30S-25W	22	184

NON-PRODUCING LEASES COMANCHE COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6299	8-21-61	Ora A. Baker, et ux	All interest in 160 acres in NW/4 Section 25-33S-20W	21	71
6300	8-21-61	Rose Norton, a widow	All interest in 160 acres in SE/4 Section 26-33S-20W	21	70
6302	8-21-61	Mable Rich, a widow	All interest in 160 acres in SW/4 Section 1-33S-20W	21	75
6438	8-21-61	Mable Rich, et al	All interest in 160 acres in Lots 3 & 4 & S/2 NW/4 Section 1-33S-20W	21	74

STATE OF KANSAS COMANCHE COUNTY

NON-PRODUCING MINERALS

- 2217 Edward Snavely, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 320 acres being SW/4, N/2 NW/4, SW/4 NW/4, NW/4 NE/4 Section 36-34S-18W
- 2218 Edward Snavely, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 305 acres being SW/4 Section 25; SE/4, less 15 acres out of SW/corner Section 26-33S-19W

NON-PRODUCING LEASES DECATUR COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6420	1-30-57	Martin Unger et ux	¼ interest in 160 acres in NW/4 Section 24-2S-30W subject to 1/16 of 7/8 ORI	26	622
6425	6- 4-62	Arthur J. Berndt et ux	¼ interest in 160 acres in NE/4 Section 35-2S-30W subject to 1/16 of 7/8 ORI	32	75
6439	6-19-62	Richard F. Reith et ux	¼ interest in 320 acres in W/2 Section 20-2S-29W subject to 1/16 of 7/8 ORI	32	118
6440	6-20-62	Earl Nutter et ux		32	162
	6-20-62	Otis Dewey et ux		32	162
	6-20-62	Lyle Dewey et ux		32	159
	6-20-62	Bessie Jennings et vir		32	164
	6-19-62	Elbert T. May et ux	¼ interest in 160 acres in SE/4 Section 30-2S-29W subject to 1/16 of 7/8 ORI	32	117
6441	6-23-62	Earl Nutter et ux		32	163
	6-23-62	Bessie Jennings et vir		32	165
	6-23-62	Lyle Dewey et ux		32	158
	6-23-62	Elbert T. May et ux		32	157
	6-23-62	Otis Dewey et ux	¼ interest in 320 acres in NE/4 Section 31 and SW/4 Section 32-2S-29W subject to 1/16 of 7/8 ORI	32	160

NON-PRODUCING LEASES EDWARDS COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5561	2-15-55	Esther G. McClanahan	All interest in 160 acres in Lots 1, 2 & 5 & S/2 NE/4 Section 28-26S-19W	37	43
5596	3-17-55	Dale Lancaster et al	All interest in 160 acres in SE/4 Section 2-25S-19W	37	71
5597	3-17-55	Dale Lancaster et al	All interest in 255 acres in all that portion of the NW/4 & NE/4 lying East of the public road and the E/2 SE/4 & NW/4 SE/4 of Section 11-25S-19W	37	82
5598	3- 4-55	Louis Lockwood et ux	All interest in 160 acres in NE/4 Section 8-25S-19W	37	63

STATE OF KANSAS EDWARDS COUNTY

NON-PRODUCING MINERALS

1488 R. E. Israel, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under
280 acres being NE/4, N/2 SE/4, SE/4 SE/4 Section 31-26S-17W

**NON-PRODUCING LEASES
ELLIS COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6485	11-30-62	Ralph C. Bowlby et al	¼ interest in 160 acres being SW/4 Section 1-11S-16W Subject to 1/16 of 7/8 ORI	203	465
6486	11-30-62	Ralph C. Bowlby et al	¼ interest in 160 acres being NE/4 Section 1-11S-16W Subject to 1/16 of 7/8 ORI	203	467
6520	11-29-62	Charles R. Cerney	¼ interest in 160 acres being SW/4 Section 14-14S-20W Subject to 1/16 of 7/8 ORI	203	457
6521	11-29-62	Lou Cerney	¼ interest in 160 acres being SE/4 Section 14-14S-20W. Subject to 1/16 of 7/8 ORI	203	455
6522	11-29-62	Lou Cerney	¼ interest in 160 acres being NE/4 Section 14-14S-20W. Subject to 1/16 of 7/8 ORI	203	459
6523	11-29-62	Joseph Cerney	¼ interest in 160 acres being NW/4 Section 14-14S-20W. Subject to 1/16 of 7/8 ORI	203	461
6524	12- 5-62	Hugh Burnett, Trustee	¼ interest in 160 acres being NE/4 Section 28-14S-20W. Subject to 1/16 of 7/8 ORI	203	500
6526	12-21-62	Wilfred C. Wann et al	½ interest in 160 acres being NW/4 Section 27-14S-20W. Subject to 1/16 of 7/8 ORI	204	234
	12-21-62	Elizabeth H. Blake et al	½ interest in 160 acres being NW/4 Section 27-14S-20W. Subject to 1/16 of 7/8 ORI	204	220
6548	4-16-63	Frederick W. Freking, Trustee	¼ interest in 360 acres being S/2 Section 21-14S-20W	208	16
6549	5-16-63	Hugh Burnett, Trustee	¼ interest in 160 acres being SW/4 Section 22-14S-20W	207	643
6550	4-16-63	A. Norbert Deutscher et ux	¼ interest in 160 acres being NW/4 Section 28-14S-20W	207	421
6551	4-16-63	Lambertina Honas et al	¼ interest in 160 acres being SW/4 Section 11-14S-20W	207	361
6552	4-15-63	Charles R. Cerney	¼ interest in 160 acres being SE/4 Section 15-14S-20W	207	419
6553	4-16-63	Walter J. Haselhorst	¼ interest in 320 acres being N/2 Section 15-14S-20W	207	96

**NON-PRODUCING LEASES
FINNEY COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
4817	7-24-61	Geneva Adelia Davis, Individually & Gdn.		OG45	450-1
	7-24-61	John W. Davis et ux	½ interest in 320 acres being NW/4 Sec- tion 29 and SE/4 Section 30-21S-31W	OG44	471-2
4821	4-13-61	E. Mearl Hutton et ux	All interest in 414 acres being Lots 1, 2 & S/2 NE/4 & SE/4 Section 1-26S-31W	OG44	535-6
4950	4-13-61	Melvin O. Nuss et ux	All interest in 160 acres being SE/4 Sec- tion 9-23S-28W	OG44	418-9
6293	7-24-61	Geneva Adelia Davis, Individually & Gdn.		OG45	448-9
	7-10-61	John W. Davis et ux	½ interest in 480 acres being W/2 & SE/4 Section 31-21S-31W	OG45	446-7
6298	8-23-61	Ora N. Phipps et ux	All interest in 160 acres being SW/4 Sec- tion 2-23S-28W	OG45	506-7
6301	8-24-61	Clyde E. Muffitt et ux	All interest in 320 acres being N/2 Sec- tion 30-22S-28W	OG45	527-8
6305	8-24-61	Sam Swingle et ux	All interest in 320 acres being S/2 Section 18-23S-29W	OG45	538-9
6328	9- 1-61	Ontje A. Oltmans et ux	All interest in 320 acres being N/2 Sec- tion 6-22S-31W	OG45	682-4
6336	10- 1-61	Robert D. Norton et ux	All interest in 80 acres being S/2 NE/4 Section 10-23S-27W	OG46	61-2
6417	8-24-61	Garland Phipps et ux	All interest in 160 acres being NW/4 Sec- tion 11-23S-28W	OG45	509-10
6462	10- 1-61	Robert D. Norton et ux	All interest in 80 acres being N/2 NE/4 Section 10-23S-27W	OG45	58-9

**NON-PRODUCING LEASES
FORD COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5622	6-22-55	Mary Mathis et vir	All interest in 160 acres in SE/4 Section 17-26S-21W	7	603
5623	6-14-55	Mary Mathis et vir	All interest in 160 acres in NE/4 Section 20-26S-21W	7	605

**NON-PRODUCING LEASES
GOVE COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5955	3 7-57	R. D. Adams et ux	All interest in 80 acres being W/2 SW/4 Section 8-14S-27W	11-H	304
5956	3- 7-57	R. D. Adams et ux	All interest in 80 acres being N/2 NE/4 Section 8-14S-27W	11-H	305
5957	3- 8-57	Glen Albin et ux	All interest in 320 acres being E/2 Section 22-14S-27W	11-H	306
5958	3- 7-57	Lester Albin et ux	All interest in 320 acres being S/2 Section 29-14S-27W	11-H	307
5959	3- 8-57	Willis Hockersmith et ux	All interest in 320 acres being NW/4, N/2 SW/4 & N/2 SE4 Section 28-12S-31/W	11-H	308
5965	3-15-57	Floyd S. Burris et ux	All interest in 320 acres being W/2 Sec- tion 12-13S-31W	11-H	330
5971	4- 3-57	R. H. Thomas et ux	All interest in 480 acres being E/2 & NW/4 Section 25-11S-31W	11-H	343
6502	3- 1-63	Felix Bechard et ux	All interest in 320 acres being E/2 Section 3-11S-29W	12	335-6
6503	3- 1-63	George A. Heier et ux	All interest in 320 acres being N/2 Sec- tion 10-11S-28W	12	337-8
6504	3- 1-63	Joseph Zerr, a widower	All interest in 320 acres being E/2 Sec- tion 33-11S-28W	12	327-8
6505	3- 5-63	Anthony Kuntz et ux	All interest in 320 acres being Lots 8 & 4 & S/2 NW/4 and SW/4 Section 3-13S-27W	12	333-4
6507	3-14-63	Bernard F. Lang et ux	All interest in 320 acres being N/2 Sec- tion 27-11S-27W	12	329-330
6508	4- 3-63	Thomas Werth et ux	All interest in 320 acres being E/2 Sec- tion 33-11S-27W	13	237-238
6510	3-20-63	Mike M. Younger et ux	All interest in 320 acres being W/2 Sec- tion 10-12S-27W	12	347-8
6511	3-20-63	Raymond E. Slawson et ux	All interest in 320 acres being S/2 Sec- tion 14-13S-29W	12	389-390
6512	3-25-63	Kermit Johnson et ux	All interest in 320 acres being S/2 Sec- tion 36-14S-29W	12	589-590
6513	4- 2-63	Betty Jo Flora et vir	All interest in 400 acres being S/2 & S/2 NE/4 Section 14-12S-27W	13	423-424
6514	3-25-63	Cletus J. Karlin et ux	All interest in 160 acres being NE/4 Sec- tion 12-11S-30W	13	15-16
6515	3-25-63	Cletus J. Karlin et ux	All interest in 160 acres being SE/4 Sec- tion 12-11S-30W	13	17-18
6516	3- 6-63	Mattie M. Parsons et al	All interest in 320 acres being N/2 Sec- tion 13-12S-26W	13	87-88
6517	3-20-63	Melissa Boyd, a widow	All interest in 320 acres being E/2 Sec- tion 36-12S-26W	12	573-574
6528	4- 5-63	S. S. Ebbert et ux	All interest in 320 acres being W/2 Sec- tion 9-12S-26W	13	549-550
6531	4-23-63	John C. Bowman a single man	All interest in 160 acres being SW/4 Sec- tion 33-11S-26W	13	673-674
6532	4- 4-63	Samuel B. Bowman	All interest in 160 acres being NW/4 Sec- tion 33-11S-26W	16	671-672

EXHIBIT C-2—Page 7

**STATE OF KANSAS
COUNTY OF GOVE**

NON-PRODUCING MINERALS

2245 Guy R. Davidson et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 800 acres being Section 35, NW/4 Section 36-15S-28W

**NON-PRODUCING LEASES
GREELEY COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6202	4-22-59	George H. Gill, et ux	All interest in 160 acres in SW/4 Section 25-20S-43W	19	402-3
6203	4- 9-59	William Cannon, et al	All interest in 160 acres in SW/4 Section 31-20S-42W	19	398-9

**NON-PRODUCING LEASES
HARPER COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6136	9-19-57	Eldon L. Fugitt, et ux	$\frac{1}{2}$ Interest in 160 acres in S/2 S/2 Section 8-31S-5W	48	583

**NON-PRODUCING LEASES
HODGEMAN COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5733	4-30-56	Clara Byrum, et vir	½ interest in 160 acres being NE/4 Section 11-22S-22W	10	519
5735	4-21-56	T. C. Bowie, et ux	All interest in 160 acres being NE/4 Section 12-21S-22W	10	522
5742	4-21-56	O. T. Salmans, et ux	All interest in 160 acres being SE/4 Section 36-21S-23W	10	525
5747	5-11-56	E. D. Miller, et ux	½ interest in 160 acres being SE/4 Section 11-22S-22W	11	131
5823	8-28-56	John Cossman, et ux	All interest in 301 acres being Lots 1, 2, 3, and 4 and E/2 W/2 Section 19-24S-26W	11	184
5839	8-28-56	Quentin A. Doll	½ interest in 640 acres being Lots 1, 2, 3 and 4 and S/2 N/2 and S/2 Section 2-21S-25W	11	204
	8-28-56	W. J. Reifling, et ux	½ interest same as above	11	205
5840	9-10-56	L. S. Durr, et ux	All interest in 320 acres being NE/4 & S/2 NW/4 Section 15-24S-25W	11	217
5841	9-10-56	L. S. Durr, et ux	All interest in 240 acres being SW/4 and N/2 SE/4 Section 15-24S-25W	11	218
5852	8-28-56	John Cossman, et ux	All interest in 160 acres being NW/4 Section 27-23S-26W	11	162
5853	4-21-56	O. T. Salmans, et ux	All interest in 320 acres being N/2 Section 6-23S-22W	11	233
5854	4-21-56	W. L. Trayer, et ux	All interest in 160 acres being SE/4 Section 6-21S-22W	11	125
5861	8-28-56	Christine M. Doll, et al	All interest in 640 acres being Lots 1, 2, 3 and 4 and S/2 N/2 and S/2 Section 3-23S-26W	11	328
5950	8-28-56	John Cossman, et ux	All interest in 160 acres being NE/4 Section 32-23S-26W	11	622
6359	12- 1-61	Harry E. Cole, et ux	All interest in 160 acres being NW/4 Section 12-24S-25W	15	170
6360	12-15-61	Delores Ochs, et vir	All interest in 160 acres being N/2 S/2 Section 11-23S-26W	15	177
6361	12-15-61	Irene Strecker, et vir	All interest in 80 acres being S/2 SW/4 Section 11-23S-26W	15	176
6362	12-15-61	Alice Cotton, et vir	All interest in 80 acres being S/2 SE/4 Section 11-23S-26W	15	175
6387	3-16-62	J. Orville Meyer, et ux	All interest in 320 acres being S/2 Section 12-24S-23W	15	249
6388	3-12-62	Dwight M. Eakin, et ux	All interest in 320 acres being W/2 Section 26-21S-21W	15	245
6413	4-11-62	James P. Mooney, et ux	All interest in 168.65 acres being Lots 1 and 2 and E/2 NW/4 Section 19-24S-22W	16	28
6464	8-30-62	Worth Pitts	19/32 interest in 160 acres being NE/4 Section 12-22S-22W	16	362
	11-27-62	Mid-American Oil Co.	13/32 interest in 160 acres being NE/4 Section 12-22S-22W	17	183

EXHIBIT C-2—Page 9

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6465	8-30-62	Worth Pitts	19/32 interest in 160 acres being SE/4 Section 12-22S-22W	16	363
	9-27-62	Mid-American Oil Co.	13/32 interest in 160 acres being SE/4 Section 12-22S-22W	17	184
6494	1-12-63	Robert B. Bacon	¼ interest in 360 acres being S/2 Section 28-21S-21W (Subj. to 1/16 of 7/8 O. R. I.)	17	212
6567	8-29-63	Mae A. Warner, et vir	¼ interest in 160 acres being SW/4 Section 16-22S-23W	18	116
6574	3-10-64	James C. Campbell	¼ interest in 80 acres being W/2 NE/4 Section 16-22S-23W	18	284
6575	4-20-62	James C. Campbell, et ux	¼ interest in 120 acres being N/2 SE/4 and SE/4 NE/4 Section 16-22S-23W	15	328
6576	7- 3-62	Raleigh Scothorn, et ux	¼ interest in 160 acres being NW/4 Section 22-22S-23W	16	54
6577	9-11-56	Raleigh Scothorn, et ux	½ interest in 320 acres being W/2 Section 23-22S-23W	11	599
	9-26-56	Zella E. Hubbell	1/64 interest in 320 acres being W/2 Section 23-22S-23W	11	600
	8- 7-63	Mid-American Oil Co.	13/128 interest in 320 acres being W/2 Section 23-22S-23W	18	87
	8- 7-63	Gulf Coast Western Oil Co.	1/128 interest in 320 acres being W/2 Section 23-22S-23W	18	97
6619	8-11-62	Sophia Nall, et al	½ interest in 320 acres being Lots 1 and 2 and S/2 NE/4 and SE/4 Section 1-24S-23W (Subj. to 1/16 of 7/8 O. R. I.)	16	379
6621	11- 7-63	W. H. Schroeder, et al	All interest in 150 acres being NW/4 except a strip 10 rds. wide along the South side of NW/4 Section 19-22S-24W	18	205
6622	10-16-63	Frances M. Cavanaugh	All interest in 160 acres being NE/4 Section 19-22S-24W	18	206
6623	10-17-63	Abe Rasmussen, et ux	All interest in 160 acres being SE/4 Section 19-22S-24W	18	207
6624	9-15-56	Maud Armstrong, et al	¼ interest in 160 acres being SW/4 Section 15-22S-23W (Subj. to 1/16 of 7/8 O. R. I. when production less than 35 BOPD per well, ½ of ¾ O. R. I. when production more than 35 BOPD per well)	11	403
6627	8- 3-59	Lenora Brown	¼ interest in 160 acres being SW/4 Section 5-21S-21W (Subj. to 1/32 of ¾ O. R. I.)	12	530
6628	7-30-59	F. T. Foreman, et ux	¼ interest in 160 acres being NE/4 Section 6-21S-21W (Subj. to 1/32 of 7/8 O.R.I.)	12	532
6629	7-30-59	Nora Foreman, et al	¼ interest in 160 acres being SE/4 Section 6-21S-21W (Subj. to 1/32 of ¾ O. R. I.)	12	536
6630	7-30-59	Charlie Foreman	¼ interest in 160 acres being SW/4 Section 6-21S-21W (Subj. to 1/32 of ¾ O. R. I.)	12	535

EXHIBIT C-2—Page 10

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6631	7-30-59	Charlie Foreman	¼ interest in 160 acres being NW/4 Section 7-21S-21W (Subj. to 1/32 O. R. I.)	12	534
6632	5- 5-61	Bessie Lewis, et vir	¼ interest in 640 acres being E/2 Section 7 and W/2 Section 8-21S-21W (Subj. to 1/32 of 7/8 O. R. I.)	14	286
6633	2-21-62	R. O. Croft, et ux	¼ interest in 160 acres being SW/4 Section 7-21S-21W (Subj. to 1/32 of 7/8 O. R. I.)	15	244
6636	2- 5-64	Anna Webster, et vir	All interest in 109 acres being that part of S/2 of Section 13, lying North of South line of A.T. & S.F. RR R of W, Section 18-22S-22W	18	268
6637	10-26-61	W. C. Macy, et ux	All interest in 56 acres being that part of SW/4 lying South and East of A.T. & S.F. RR R of W, Section 18-22S-22W	15	133
6647	9-16-63	Charles L. Ochs, et al	All interest in 160 acres being NW/4 Section 29-23S-25W	18	212
6648	9-16-63	Charles L. Ochs, et al	All interest in 160 acres being SE/4 Section 30-23S-25W	18	210
6649	9-16-63	Charles L. Ochs, et al	All interest in 160 acres being SW/4 Section 29-23S-25W	18	211
6668	2-27-64	Floyd Eakin	¼ interest in 310 acres being Lots 3, 4 and 5 and SE/4 NW/4 Section 6-21S-21W and SE/4 Section 1-21S-22W (Subj. to 1/16 of 7/8 O. R. I.)		
6404	3-16-62	Helen M. Fall, et vir	All interest in 320 acres being N/2 Section 35-21S-21W	15	253
6638	10-26-61	Clara Smith, et vir	All interest in 75 acres being all W/2 SE/4 lying S.E. of A.T. & S.F. RR Right of Way Section 13-22S-22W	15	134

**STATE OF KANSAS
COUNTY OF HODGEMAN**

NON-PRODUCING MINERALS

2255 I. D. Simons: An undivided ½ interest in and to the oil, gas and other minerals in and under 320 acres being E/2 Section 11-22S-22W

**NON-PRODUCING LEASES
KINGMAN COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5522	11-24-54	Louis Heller	All interest in 320 acres being SW/4 Section 23 & NW/4 Section 26-28S-10W	69	553
5530	9- 4-54	Glen W. Mohr et ux	All interest in 160 acres being SE/4 Section 19-27S-8W	69	148
5531	8- 5-54	Mary Young	All interest in 148 acres being SE/4 Section 9-29S-10W, except Tract in SE corner thereof, being 662' by 810'	69	147
5668	3- 2-55	Raymond Heimerman et al	All interest in 150 acres being NE/4 Section 10-27S-5W, except 10 acres in NE corner	73	179
6114	1-25-56	Silas B. Maple et ux	¼ interest in 40 acres being SE/4 NE/4 Section 25-29S-7W	76	167
6115	2-16-57	Blanche M. Sample et vir	¼ interest in 80 acres being W/2 SW/4 Section 29-29S-6W	79	45
6116	2-16-57	Josephine Bentley	¼ interest in 80 acres being W/2 NW/4 Section 29-29S-6W	79	46
6117	10-10-57	J. H. Maple et ux	¼ interest in 80 acres being E/2 NE/4 Section 30-29S-6W	81	83
6118	8-29-61	Floyd C. Beard et ux	¼ interest in 160 acres being E/2 NE/4 Section 31 & W/2 NW/4 Section 32, all in 29S-6W	95	286
6119	10-13-56	Esten L. McCormick et ux	¼ interest in 160 acres being SW/4 Section 20-29S-6W	77	98
6135	9-21-57	Nellie Fisher	½ interest in 160 acres being S/2 S/2 Section 28-28S-6W	80	274
6274	1-22-60	Aaron Figge et al	¼ interest in 45 acres being NE/4 NE/4 & East 5 acres of NW/4 NE/4 of Section 25-29S-7W	89	119
	4- 7-60	John H. Maple et ux	¼ interest in East 5 acres being NW/4 NE/4 & NE/4 NE/4 Section 25-29S-7W	90	64
6296	7-28-61	Esten McCormick et ux	¼ interest in 160 acres being E/2 E/2 Section 29-29S-6W	95	217
6401	1-10-62	Wilbur Kaufman et ux	¼ interest in 180 acres being SE/4 Section 7-29S-6W	97	129
6403	10- 1-53	J. H. Maple et ux	¼ interest in 160 acres being E/2 NW/4 & W/2 SE/4 Section 30-29S-6W, except 1/16 of 7/8 ORI	67	489
6568	3- 7-63	Leo F. Brown et ux	¼ interest in 80 acres being W/2 NW/4 Section 10-29S-6W	102	240
6569	8-20-63	John Zerger et ux	¼ interest in 160 acres being NW/4 Section 8-29S-6W	104	147
6570	8-21-63	Waldo J. Zerger et al	¼ interest in 80 acres being E/2 SW/4 Section 5-29S-6W	104	177
6571	9- 3-63	Harvey N. Graber et ux	¼ interest in 160 acres being SE/4 Section 5-29S-6W	104	178

NON-PRODUCING LEASES KIOWA COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5480	8-21-54	Vesta Kane et al	All interest in 320 acres being S/2 Section 19-30S-18W	1	68
5564	2- 5-55	R. Frank Ross et ux	All interest in 160 acres being NE/4 Section 24-28S-17W	2	423
5565	2-12-55	Grosvenor Foltz	All interest in 400 acres being E/2 Section 1 and N/2 NE/4 Section 12-27S-18W	2	424
5580	9-29-54	Tom C. Briggs et ux	All interest in 240 acres being SE/4 and E/2 SW/4 Section 27-30S-20W	X	228

NON-PRODUCING LEASES LANE COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5820	8-28-56	Charles W. Bretz	All interest in 960 acres being Section 7 N/2 Section 17-17S-28W	21	549
5831	9- 4-56	D. J. Hutchins et al	All interest in 640 acres being Section 8-19S-29W	21	575
5842	9- 7-56	Jay C. Walker et ux	All interest in 480 acres being W/2 Section 17 and NW/4 Section 21, all being in 18S-28W	21	576
6377	2-22-62	J. L. McWhirter et ux	All interest in 320 acres being SW/4 Section 10 and SE/4 Section 9, all in 19S-29W	24	343
6379	3-14-62	Vernon Waterson et ux	All interest in 320 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-17S-28W	24	345
6380	3- 1-62	J. R. Elmore et al	All interest in 160 acres being NE/4 Section 26-16S-28W	24	347
6381	3- 1-62	J. R. Elmore et al	All interest in 160 acres being S/2 SW/4 Section 23 and N/2 NW/4 Section 26, all in 16S-28W	24	349
6382	3- 1-62	J. R. Elmore et ux	All interest in 240 acres being SE/4 and S/2 NE/4 Section 23-16S-28W	24	351
6385	3- 1-62	J. R. Elmore et al	All interest in 160 acres being S/2 NW/4 & N/2 SW/4 Section 23-16S-28W	24	353

NON-PRODUCING LEASES LOGAN COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5818	8-11-56	C. F. Dean et ux	All interest in 320 acres being E/2 Section 20-15S-37W	1	437
5966	3-15-57	A. B. Kruse et al	All interest in 320 acres being E/2 Section 5-14S-32W	4	545
5967	3-27-57	Elma A. Ahrens et vir	All interest in 480 acres being E/2 & NW/4 Section 14-11S-33W	5	171
5968	3-14-57	John Kowalski et ux	½ interest in 320 acres being W/2 Section 35-12S-32W	5	163
	3-14-57	Philip Michel	½ interest in 320 acres same as above	5	165
5973	3-14-57	A. C. Ziegler et ux	All interest in 320 acres being N/2 Section 20-12S-32W	4	512

EXHIBIT C-2—Page 13

**NON-PRODUCING LEASES
MEADE COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6288	7-14-61	Chester M. Rexford, et ux	All interest in 160 acres being NW/4 Section 16-21S-27W	13	150
6289	7-29-61	Joe A. Gerber, et ux	All interest in 160 acres being NW/4 Section 23-31S-27W	13	157
6291	8- 2-61	Mary Lauppe, et vir	All interest in 440 acres being NE/4 SW/4 and S/2 NW/4 and E/2 Section 7-33S-26W	13	168
6303	8-28-61	Chester Rexford, et ux	All interest in 160 acres being NW/4 Section 17-30S-29W	13	201
	8-28-61	Chester Rexford, et ux	All interest in 160 acres being SW/4 Section 17-30S-29W	13	200
6304	8-21-61	Mabel Marrs, et vir	All interest in 320 acres being S/2 Section 30-32S-26W	13	194
6539	7-29-61	Joe A. Gerber, et ux	All interest in 160 acres being SE/4 Section 23-31S-27W	13	156
6625	12-31-60	Clarice L. Cornett, et vir	½ interest in 400 acres being Lots 6 & 7 and E/2 SW/4 and SE/4 Section 6 and Lot 1 and NE/4 NW/4 Section 7, all in 33S-26W (Subj. to 1/16 of 7/8 O. R. I.)	12	397
	12-31-60	Eva M. Coon	½ interest in 400 acres being same as above described lands	12	398

**STATE OF KANSAS
COUNTY OF MEADE**

NON-PRODUCING MINERALS

2633 John L. Dickson: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 7-34S-27W

**NON-PRODUCING LEASES
NESS COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5723	3-24-56	Henry Borger, et ux	All interest in 160 acres being NW/4 Section 28-19S-23W	44	445
5724	8-24-56	Henry Borger, et ux	All interest in 160 acres being SW/4 Section 28-19S-23W	44	470
5725	3-24-56	Henry Borger, et ux	All interest in 160 acres being SE/4 Section 28-19S-23W	44	471
6406	5-11-62	Ray Almquist, et ux	All interest in 160 acres being NW/4 Section 35-20S-25W	56	288
6407	5-11-62	Alfred R. Almquist, et ux	All interest in 160 acres being SE/4 Section 35-20S-25W	56	286
6408	5-11-62	Ray Almquist, et ux	All interest in 160 acres being SW/4 Section 35-20S-25W	56	287
6461	2-14-57	E. E. McGinnis, et ux	All interest in 160 acres being SE/4 Section 34-20S-25W	46	355
6469	8-29-62	Mayme E. Copeland Klein, et vir	All interest in 80 acres being W/2 SE/4 Section 26-20S-25W	56	616

EXHIBIT C-2 — Page 14

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6578	9-24-63	Dexter Miner, et ux	All interest in 160 acres being NE/4 Section 29-19S-23W	64	190
6579	9-24-63	Dexter Miner, et ux	All interest in 160 acres being NW/4 Section 29-19S-23W	64	192
6580	9-17-63	Donald W. Elbert, et ux	All interest in 160 acres being SW/4 Section 29-19S-23W	64	188
6581	9-5-62	Sadie A. Wagaman	$\frac{1}{2}$ interest in 80 acres being E/2 NW/4 Section 13-19S-24W, Above 4,431' and Subj. to 1/16 of 7/8 O. R. I.	58	352
6582	9- 6-62	Sadie Ruffhead, et al	$\frac{1}{2}$ interest in 80 acres being W/2 SE/4 Section 18-19S-24W, Above 4,431' and Subj. to 1/16 of 7/8 O. R. I.	58	295
6583	8-31-62	Milton A. Boyd	$\frac{1}{2}$ interest in 80 acres being E/2 NW/4 Section 24-19S-24W, Above 4,431' and Subj. to 1/16 of 7/8 O. R. I.	58	357
6596	10- 1-63	Anna D. Stum	All interest in 160 acres being SE/4 Section 29-19S-23W	64	331
6598	10-16-63	Lydia Krug	All interest in 160 acres being NE/4 Section 28-19S-23W	64	434
6599	10-16-63	G. A. Goodman	$\frac{1}{2}$ interest in 680 acres being SE/4 Section 8; W/2 Section 16; SE/4 Section 16; and a tract containing 40 acres, more or less, in NE/4 Section 16, described as follows: beginning at SW corner of said Quarter Section; thence North 136 rods; thence East 48 rods; thence South 136 rods; thence West 48 rods to place of beginning, all in 19S-23W	64	420
6600	10-16-63	G. A. Goodman	$\frac{1}{2}$ interest in 560 acres being W/2 NW/4 Section 9; SW/4 Section 9; and E/2 Section 17, all in 19S-23W	64	393
6601	10-16-63	G. A. Goodman	$\frac{1}{2}$ interest in 640 acres being all of Section 21-19S-23W	64	395
6602	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 240 acres being NE/4 and E/2 NW/4 Section 9-19S-23W	64	397
6603	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being SE/4 Section 9-19S-23W	64	399
6604	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 120 acres being NE/4 except tract containing 40 acres in SW corner of said Quarter Section, Section 16-19S-23W	64	401
6605	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being NW/4 Section 15-19S-23W	64	403
6606	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being NE/4 Section 15-19S-23W	64	405
6607	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being SW/4 Section 15-19S-23W	64	407
6608	5-27-63	Vesta K. Curry, Trustee	$\frac{1}{2}$ interest in 160 acres being SW/4 Section 10-19S-23W	64	409

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6609	5-27-63	Vesta K. Curry	½ interest in 160 acres being NW/4 Section 10-19S-23W	64	411
6610	5-27-63	Vesta K. Curry	½ interest in 160 acres being SE/4 Section 15-19S-23W	64	413
6611	5-27-63	Anna Goodman, et al	½ interest in 240 acres being NW/4 and W/2 NE/4 Section 22-19S-23W	64	415
6612	5-27-63	Anna Goodman, et al	½ interest in 160 acres being SW/4 Section 22-19S-23W	64	417
6626	1-22-64	Irving Doebbeling, et ux	All interest in 80 acres being N/2 SW/4 Section 27-20S-25W	65	236
6634	2-14-57	E. E. McGinnis, et ux	All interest in 160 acres being NE/4 Section 34-20S-25W (Subj. to 1/16 of 7/8 O. R. I.)	Ms46	355
6670	2-18-60	Harry Rowe, et ux	All interest in 320 acres being W/2 Section 33-20S-21W	Ms52	230

**STATE OF KANSAS
COUNTY OF NORTON**

NON-PRODUCING MINERALS

- 2533 C. W. Mandler et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 33-5S-22W
- 2535 C. W. Mandler et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being N/2 SE/4, S/2 NE/4 Section 7-5S-23W
- 2566 W. H. Ludwig et ux: An undivided ½ interest and to the oil, gas and other minerals in and under 160 acres being NE/4 Section 35-4S-24W

**NON-PRODUCING LEASES
PAWNEE COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6661	1-20-64	Lora Woods, a widow	All interest in 160 acres being NW/4 Section 12-21S-20W	M/37	534
6662	1-20-64	Lora Woods, a widow	All interest in 160 acres being NE/4 Section 12-21S-20W	M/37	537
6663	1-20-64	Lora Woods, a widow	All interest in 160 acres being SW/4 Section 12-21S-20W	M/37	536
6664	1-20-64	Lora Woods, a widow	All interest in 160 acres being SE/4 Section 12-21S-20W	M/37	535

**NON-PRODUCING LEASES
PRATT COUNTY, KANSAS**

No. Lease	Date Lease	Lessor	Description	Recorded	
				Book	Page
5512	12- 2-54	Edward L. Miller, et ux	All interest in 160 acres being SW/4 Section 34-29S-11W	64	455
5513	12- 2-54	Edward L. Miller, et ux	All interest in 80 acres being NW/4 NW/4 Section 28; NE/4 NE/ Section 29-29S-11W	64	457
5514	12- 2-54	Edward L. Miller, et ux	All interest in 160 acres being SE/4 Section 20-29S-11W	64	463
5519	12- 3-54	George D. Inslee, et ux	All interest in 160 acres being SW/4 Section 26-29S-12W	64	473
5969	3-15-57	Guy Ford, et ux	All interest in 240 acres being NW/4 and W/2 NE/4 Section 15-29S-11W	73	267
5970	3-15-57	Margaret Harrington Wheeler, et vir	All interest in 240 acres being SW/4 and W/2 SE/4 Section 15-29S-11W	73	269
6588	9-20-63	T. A. Hacker, et ux	An undivided 1/2 interest in 160 acres being SW/4 Section 28-27S-13W	101	103
6589	8- 6-63	Vernon J. Schaffer, et ux	An undivided 1/2 interest in 480 acres being W/2 Section 21; NW/4 Section 28-27S-13W	101	101
6590	8-14-63	Mildred B. Carver, et al	An undivided 1/2 interest in 220 acres being NE/4, North 60 acres of SE/4 Section 28-27S-13W	101	105
6591	8- 6-63	Charlie Honeman, et ux	An undivided 1/2 interest in 480 acres being E/2 and SW/4 Section 29-27S-13W	101	107
6593	10-23-63	Orville Watson, et ux	All interest in 160 acres being SW/4 Section 2-27S-14W	101	425
6594	10-16-63	Milo Tobias, et ux	All interest in 320 acres being NW/4 and NE/4 Section 2-27S-14W	101	423
6595	10-16-63	Axline Fay Peters	All interest in 160 acres being SW/4 Section 15-27S-14W	101	421
6614	11- 7-63	Dollie Logue	All interest in 160 acres being NW/4 Section 15-27S-14W	101	581
6615	11- 7-63	Dollie Logue	All interest in 80 acres being S/2 NE/4 Section 15-27S-14W	101	583
6616	11- 7-63	Walter E. Shannon, et ux	All interest in 80 acres being N/2 NE/4 Section 15-27S-14W	101	579

**NON-PRODUCING LEASES
RAWLINS COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5774	5- 7-56	Minnie MacKenzie, et al	All interest in 320 acres being E/2 Section 32-5S-31W	5	50

NON-PRODUCING LEASES SCOTT COUNTY, KANSAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
4759	12- 8-60	Fred E. Strickert, a widower	All interest in 160 acres being SE/4 Section 27-18S-32W	Photo I	229
4760	12- 8-60	Fred F. Strickert, a widower	All interest in 160 acres being NE/4 Section 27-18S-32W	Photo I	230
5835	8-30-56	Henry D. Parkinson, et ux	All interest in 320 acres being E/2 Section 11-18S-33W	Photo I	20
5836	8-30-56	Henry D. Parkinson, et ux	All interest in 320 acres being W/2 Section 11-18S-33W	Photo I	21
5862	9-25-56	Lee L. Brown, et ux	All interest in 320 acres being E/2 NW/4 & SW/4 Section 1 & N/2 NW/4 Section 12-16S-32W	Photo I	26
5863	9-25-56	Lee L. Brown, et ux	All interest in 300.71 acres being NW/4 Section 6-16S-31W & SE/4 Section 1-16S-32W	Photo I	25

NON-PRODUCING LEASES SEDGWICK COUNTY, KANSAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5576	1-14-55	Nick Strunk, et al	All interest in 80 acres being S/2 SE/4 Section 9-29S-1W	M338	581
5577	1-12-55	Nicholas L. Strunk, et ux	All interest in 80 acres being N/2 SE/4 Section 9-29S-1W	M338	585
5578	1-27-55	John N. Perkins, et ux	All interest in 80 acres being S/2 SW/4 Section 9-29S-1W	M338	589
5579	2-17-55	A. Roy Hopkins, et ux	All interest in 80 acres being N/2 SW/4 Section 9-29S-1W	M338	595

NON-PRODUCING LEASES SEWARD COUNTY, KANSAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
4758	11-30-60	George D. Steffen, et ux	All interest in 160 acres being SW/4 Section 20-32S-31W	190	93

**STATE OF KANSAS
SHERIDAN COUNTY**

NON-PRODUCING MINERALS

- 2334 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 10-8S-30W
- 2335 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 12-8S-30W
- 2346 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 36-8S-30W
- 2352 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 32-6S-30W
- 2353 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 27-7S-30W
- 2372 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 13-8S-29W
- 2373 Edwin A. Patterson: An undivided $\frac{1}{2}$ interest in and to the oil, gas and minerals in and under 160 acres being NE/4 Section 15-7S-30W

**NON-PRODUCING LEASES
SHERMAN COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5828	8-13-56	Oren M. Parish, et ux	All interest in 160 acres being SW/4 Section 8-9S-41W	OG13	223
5829	8-13-56	Oren M. Parish, et ux	All interest in 813 acres being S/2 Section 7-9S-41W	OG13	221
5830	8-13-56	Lila L. Parish, et al	All interest in 160 acres being NE/4 Section 7-9S-41W	OG13	219
5858	8-13-56	Emery L. Moore, et ux	All interest in 480 acres being N/2 & SW/4 Section 12-10S-41W	OG13	415

**STATE OF KANSAS
COUNTY OF SUMNER**

NON-PRODUCING MINERALS

- 2684 John L. Dickson: An undivided 1.84375/420ths interest in and to the oil, gas and other minerals in and under 420 acres being Lots 1, 2 and 3, SE/4 NW/4, N/2 NW/4, NE/4, Section 16-35S-3W

**NON-PRODUCING LEASES
THOMAS COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5766	6-19-56	George M. Budge, a single man	All interest in 320 acres being N/2 Section 4-10S-36W	2	142
5773	6-20-56	Sam Medford, et ux	All interest in 640 acres being Section 19-9S-35W	2	333
5776	6-19-56	G. W. Gibson, et ux	All interest in 160 acres being SW/4 Section 4 and 1/2 interest in 160 acres being NW/4 Section 9-10S-36W	2	448
	6-19-56	The Victory Life Ins. Co.	1/2 interest in 160 acres being NW/4 Section 9-10S-36W	2	452

**STATE OF KANSAS
COUNTY OF THOMAS**

NON-PRODUCING MINERALS

- 2337 George E. Summers: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 34-9S-36W
- 2338 George E. Summers: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 2-9S-36W
- 2336 George E. Summers: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 35-7S-34W

**NON-PRODUCING LEASES
TREGO COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5680	11-30-55	George E. Mai, et ux	All interest in 160 acres being SE/4 Section 33-13S-24W	TTT	331
5994	4-27-57	Glenn O. Speer, et ux	All interest in 160 acres being NW/4 Section 11-14S-23W	AAAA	510
6495	3-11-63	Edward F. Spena, et ux	All interest in 320 acres being E/2 Section 4-13S-25W	A-17	800
6496	3-12-63	Paul H. Sauer, a single man	All interest in 320 acres being E/2 Section 7-14S-25W	A-17	348
6497	3-12-68	Catherine Lacerte, et vir	All interest in 160 acres being NW/4 Section 21-12S-25W	A-17	290
6498	3-12-63	Catherine Lacerte, et vir	All interest in 160 acres being SW/4 Section 21-12S-25W	A-17	292
6499	3-12-73	Walter F. Kline, et ux	All interest in 320 acres being N/2 Section 16-12S-24W	A-17	294
6500	3-14-63	William R. Terpening, a single man	All interest in 160 acres being N/2 N/2 Section 7-13S-24W	A-17	298
6501	3-14-63	James Wedermyer, et ux	All interest in 160 acres being S/2 N/2 Section 7-13S-24W	A-17	296
6518	3-15-63	Leslie C. Frye, et ux	All interest in 160 acres being NW/4 Section 11-15S-25W	A-17	334
6519	3-15-63	Leslie C. Frye, et ux	All interest in 160 acres being SW/4 Section 11-15S-25W	A-17	332
6509	3-12-63	Blaine E. Sites, et al	All interest in 320 acres being S/2 Section 33-13S-25W	A-18	405
6529	3- 8-63	John E. O'Toole, Gdn.	All interest in 320 acres being W/2 Section 8-13S-25W	A-18	401
6530	3- 8-63	John E. O'Toole, Gdn.	All interest in 320 acres being N/2 Section 33-13S-25W	A-18	403

**NON-PRODUCING LEASES
WALLACE COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5826	8-10-56	C. F. Dean, et ux	All interest in 320 acres being N/2 Section 36-15S-38W	16	34
6201	4- 7-59	Ray A. Zellner, et ux	All interest in 160 acres being SE/4 Section 19-14S-41W	18	493

**NON-PRODUCING LEASES
ALFALFA COUNTY, OKLAHOMA**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book Page</i>	
3994	8- 7-55	Harvey E. Beltz, et ux	All interest in 160 acres being S/2 NW/4, S/2 SW/4 Sec. 25-27N-12W	128	357
5652	8-27-55	William Harold Crain, et ux	All interest in 221.25 acres being SW/4 Sec. 8, North 61.25 acres of NW/4 Sec. 17-24N-9W	134	18
5653	8-27-55	W. H. Brown, et al	All interest in 320 acres being W/2 Sec. 14-25N-10W	134	21
5656	9-14-55	Vernon Means, et ux	All interest in 160 acres being SW/4 Sec. 13-26N-11W	135	136
5691	1-16-56	Harvey E. Beltz, et ux	½ interest in 80 acres being N/2 SW/4 Sec. 25-27N-12W	139	279
	1-16-56	Edna Beltz Laufer, et vir	½ interest in 80 acres being N/2 SW/4 Sec. 25-27N-12W	139	281
6290	7- 8-55	Mary Pekrul	½ interest in 160 acres being SE/4 Sec. 8-23N-9W	139	18

**STATE OF OKLAHOMA
COUNTY OF ALFALFA**

NON-PRODUCING MINERALS

- 1722 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SW/4 Section 9-24N-10W
- 1723 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SW/4 Section 23-24N-10W, except Right of Way of Arkansas Valley and Western Railway Co.
- 1724 C. A. Hash et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 3-27N-10W
- 1725 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NE/4 Section 25-28N-10W
- 1726 D. L. Edmiston: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 9-23N-11W
- 1733 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 1-23N-11W
- 1995 W. G. Parker et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 9-23N-12W

**STATE OF OKLAHOMA
COUNTY OF BEAVER**

NON-PRODUCING MINERALS

- 2508 Robert B. Harrington: An undivided ½ interest in and to all the oil, gas and other minerals in and under 760.00 acres being S/2, E/2 NE/4 Section 21, NW/4 NW/4 Section 22, NE/4, N/2 S/2 Section 27-6N-23ECM
- 2573 Dickson Oil Royalty Company: An undivided ¼ interest in and to all the oil, gas and other minerals in and under 160.00 acres being N/2 SW/4, SW/4, Section 31-4N-23ECM, NW/4 NW/4 Section 6-3N-23ECM

EXHIBIT C-2 — Page 22

**NON-PRODUCING LEASES
BECKHAM COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5645	12-31-54	John Johnson, et al	All interest in 80 acres being S/2 SW/4 Section 15-19N-22W. Subject to a 1/16 of 7/8 ORI	125	24
5648	1- 8-55	Mrs. Mary McMahan	¼ interest in 160 acres being SW/4 Section 16-9N-22W. Subject to a 1/16 of 3/4 of 7/8 ORI	125	98
	1- 8-55	Tom Shipman	¼ interest in 160 acres being SW/4 Section 16-9N-22W. Subject to a 1/16 of 3/4 of 7/8 ORRI	125	26
	6- 3-55	Luther V. Harris, et ux	¼ interest in 160 acres being SW/4 Section 16-9N-22W. Subject to a 1/16 of 3/4 of 7/8 ORI	128	399
5706	4-29-60	Mrs. J. C. (Susie) Allen, et al	25.15725% interest in 80 acres being E/2 NE/4 Section 20-9N-22W	170	443

All the above described leases being subject to that certain Operating Agreement dated December 7, 1956, by and between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operating Parties, covering lands in Section 9, 10, 15, 16, 17, 20, 21 and 22, Township 9 North, Range 22 West, in which Wilcox Oil Company's net interest is 25.15725 percent.

**NON-PRODUCING LEASES
BLAINE COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5428	5-11-63	Henry Eichelberger, et ux	All interest in 480 acres being N/2 & SW/4 Section 9-13N-13W	90	628
6022	8- 7-57	T. H. McViers, et al	All interest in 160 acres being SE/4 Section 24-15N-11W	51	242

**NON-PRODUCING LEASES
CADDO COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5173	3-15-62	Frank R. King, et ux	All interest in 80 acres being S/2 NW/4 Section 19-9N-13W	362	571
5176	3-15-62	Ben Sylvester, et ux	All interest in 160 acres being NE/4 Section 23-11N-13W	362	573
5180	2- 9-62	Norman E. Hawkins, et ux	All interest in 160 acres being SW/4 Section 14-11N-12W	359	325
5430	4-17-63	Edwin E. Hart, et ux	All interest in 160 acres being NW/4 Section 30-12N-13W	385	275
5432	5- 2-63	Blanche C. Kimble, a widow	All interest in 233.80 acres being in Lots 1 & 2 of NW/4 Section 31-12N-12W & SE/4 Section 36-12N-13W	386	327
5484	4-17-63	Romie R. Reynolds, et ux	All interest in 148.54 acres being Lots 1 & 2 & E/2 NW/4 Section 19-12N-13W	385	113
5799	7-14-56	L. A. Smith, et al	All interest in 160 acres being SE/4 Section 17-11N-12W	251	373
6065	9-30-57	Hainta et al (Contract No. 14-20-206-15052)	All interest in 159.90 acres being NE/4 SW/4; Lot 4 SW/4 & S/2 SW/4 Section 33-8N-18W	—	—
6287	6-22-61	George L. Saathoof, et ux	All interest in 160 acres being SE/4 Section 36-8N-11W	346	295
6533	4-17-63	Leona M. Doffing, et vir	All interest in 80 acres being S/2 NW/4 Section 16-12N-13W	386	325
6534	5- 1-63	Thelma Rose Kimball, et vir	All interest in 160 acres being S/2 SW/4 Section 9 and N/2 NW/4 Section 16-12N-13W	386	329
6537	4-25-63	Ray H. Karlin et ux	An undivided 117/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	195
	4-25-63	Hattie E. Spurrier et vir	An undivided 18/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	197
	4-25-63	Claud S. Calyburn et al	An undivided 42/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	205
	4-25-63	Ethel M. Thompson et vir	An undivided 18/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	199
	4-25-63	Viola B. Jelks et vir	An undivided 9/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	205
6538	4-29-63	Stella Metz et vir	All interest in 160 acres being NW/4 & ½ interest in 240 acres being SW/4 & W/2 NE/4, all in Section 35-9N-11W	387	185
	5- 9-63	Alan Haight et ux	½ interest in 80 acres being W/2 NE/4 Section 35-9N-11W	387	189
	5-10-63	Fred S. Stephenson et ux	½ interest in 160 acres being SW/4 Section 35-9N-11W	387	191

EXHIBIT C-2—Page 24

NON-PRODUCING LEASES CANADIAN COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6015	6-20-57	Clyde Scott et ux	All interest in 200 acres being SW/4 SW/4 Section 13 & NE/4 Section 23-14N-7W	304	300
6016	6-18-57	Kermit K. Scott et ux	All interest in 120 acres being E/2 SW/4 & NW/4 SW/4 Section 13-14N-7W	304	303
6017	6-20-57	Kermit K. Scott et ux	All interest in 160 acres being SE/4 Section 13-14N-7W	304	664
6045	5-20-57	Wesley Dyer et al (Contract No. 14-20-205-929)	All interest in 160 acres being SE/4 Section 4-12N-10W	—	—
6339	11- 3-61	Ammon M. Wright et ux	½ interest in 80 acres being N/2 SW/4 Section 6-12N-5W, (Otherwise described as N. 74.57 acres of SW/4 Section 6-12N-5W)	348	436
6340	11- 3-61	John A. Zaloudik et ux	½ interest in 273 acres being Lots 3 & 4 & S/2 NW/4 and Lot 2 & W. 38.81 acres of E/2 NE/4 Section 1-12N-6W	348	481
		Ammon M. Wright et ux	½ interest in 273 acres being Lots 3 & 4 & S/2 NW/4 and Lot 2 & W. 38.81 acres of E/2 NE/4 Section 1-12N-6W	348	478

STATE OF OKLAHOMA COUNTY OF CANADIAN

NON-PRODUCING MINERALS

- 2701 R. D. Porter: An undivided ½ interest in and to all the oil, gas and other minerals in and under 129.00 acres being Lots 1, 2, NW/4 NE/4, NE/4 NW/4 Section 7-10N-7W

STATE OF OKLAHOMA COUNTY OF CARTER

NON-PRODUCING MINERALS

- 928 J. C. Cooke Oil & Gas Co: An undivided ¾ interest in and to all the oil, gas and other minerals in and under 240.00 acres being W/2 SW/4 NE/4, SE/4 NW/4, E/2 SW/4 NW/4, E/2 SW/4, N/2 SE/4 Section 15-4S-3E
- 944 J. C. Cooke Oil & Gas Co: An undivided ½ interest in and to all the oil, gas and other minerals in and under 80.00 acres being S/2 SE/4 Section 30-4S-3E
- 3444 E. E. Irby et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 30.00 acres being N/2 NE/4 NW/4, NE/4 NW/4 NW/4 Section 9-5S-2W

STATE OF OKLAHOMA COUNTY OF CLEVELAND

NON-PRODUCING MINERALS

- 2007 Odell Henson: An undivided 1/32 interest in and to all the oil, gas and other minerals in and under 160 acres being SE/4 Section 34-10N-1W.
- 2460 F. E. Burns: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160 acres being SE/4 Section 12-7N-1W.
- 2576 Dickson Oil Royalty Company: An undivided 1/320 interest in and to all the oil, gas and other minerals in and under 160 acres being SW/4 Section 4-10N-2W.
- 2650 Edith L. Davis: An undivided 1/16 interest in and to all the oil, gas and other minerals in and under 80 acres being N/2 SE/4 Section 23-6N-1E.

**NON-PRODUCING LEASES
CREEK COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6560	7- 9-63	Elvie Bradford	1/16 interest in 160 acres being NE/4 Section 32-14N-9E	—	—
	7- 9-63	June Reynolds Peabody, a widow	6/16 interest in 160 acres being NE/4 Section 32-14N-9E	938	557
	7- 9-63	Lucy Allen	2/16 interest in 160 acres being NE/4 Section 32-14N-9E	—	—
	7- 9-63	E. T. Cook et ux	1/16 interest in 160 acres being NE/4 Section 32-14N-9E	938	553
	7- 9-63	Mary Moody Brown	2/16 interest in 160 acres being NE/4 Section 32-14N-9E	938	555
	7- 9-63	Burk-Greis Oil Co.	2/16 interest in 160 acres being NE/4 Section 32-14N-9E	938	549
	7- 9-63	Carmelita Beekly, a widow	1/16 interest in 160 acres being NE/4 Section 32-14N-9E	938	551
6561	7-11-63	Irene Ausmus, Executrix and Trustee	½ interest in 20 acres being N/2 NW/4 SE/4 Section 33-14N-9E	—	—
	7-11-63	John Bishop et ux	½ interest in 20 acres being N/2 NW/4 SE/4 Section 33-14N-9E	—	—
6563	7-10-63	R. J. Koch, Jr. et al	All interest in 80 acres being E/2 SE/4 Section 17-14N-9E	—	—
6564	7-11-63	Irene Ausmus, Executrix and Trustee	½ interest in 30 acres being N/2 NE/4 SE/4 & SW/4 NE/4 SE/4 Section 32- 14N-9E	—	—
	7-11-63	John Bishop et ux	½ interest in 30 acres being N/2 NE/4 SE/4 & SW/4 NE/4 SE/4 Section 32- 14N-9E	—	—
6566	7-11-63	Doris Louise Leonard Maher	¼ interest in 40 acres being NE/4 NW/4 Section 33-14N-9E	—	—
	7-11-63	R. W. Leonard	¼ interest in 40 acres being NE/4 NW/4 Section 33-14N-9E	—	—
	7-11-63	H. R. Corey et al	¼ interest in 40 acres being NE/4 NW/4 Section 33-14N-9E	—	—
	7-11-63	John Bishop et ux	¼ interest in 40 acres being NE/4 NW/4 Section 33-14N-9E	—	—
383	1- 7-19	The Board of Commissioners of Creek Co., Okla.	Insofar as said lease covers 80 acres, be- ing N/2 SW/4 Section 35-16N-18E	171	280
6144	9-10-62	Kelly Brothers, a Business Trust	All interest in 80 acres being W/2 SE/4 Section 35-16N-8E	918	198
5402	3-21-63	George H. Denham et ux	54.47% interest in 80 acres being E/2 NE/4 Section 22-18N-10E	932	95
6555	6-19-63	Ellis E. Wilson et al	¾ interest in 160 acres being S/2 NW/4 & SW/4 NE/4 & N/2 N/2 SW/4 Section 33-14N-9E	937	82
	6-19-63	John Bishop et ux	¾ interest in 160 acres being S/2 NW/4 & SW/4 NE/4 & N/2 N/2 SW/4 Section 33-14N-9E	937	369
6556	6-24-63	R. A. Fielden et ux	5/16 interest in 80 acres being E/2 NE/4 Section 17-14N-9E	937	74

EXHIBIT C-2 — Page 26

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
	6-24-63	Berry Patterson et ux	½ interest in 80 acres being E/2 NE/4 Section 17-14N-9E	937	76
	6-24-63	J. L. Darnell et ux	1/16 interest in 80 acres being E/2 NE/4 Section 17-14N-9E	937	78
	6-24-63	A. S. Capps	½ interest in 80 acres being E/2 NE/4 Section 17-14N-9E	937	80
6557	6-24-63	Arthur M. Foster et al	All interest in 80 acres being SW/4 SW/4 Section 28 & NW/4 NW/4 Section 33- 14N-9E	937	326
6554	6-19-63	W. E. Henderson et ux	All interest in 160 acres being NW/4 and ½ interest in 80 acres being N/2 SW/4 Section 16-14N-9E	936	532
	6-25-63	R. L. Wilkinson et ux	¼ interest in 80 acres being N/2 SW/4 Section 16-14N-9E	936	534
	6-25-63	Bee Goss Smith, a widow	¼ interest in 80 acres being N/2 SW/4 Section 16-14N-9E	936	536
6558	7-10-63	Mozelle Lee Sims et vir	½ interest in 80 acres being W/2 NE/4 Section 17-14N-9E	937	466

**STATE OF OKLAHOMA
COUNTY OF CREEK**

NON-PRODUCING MINERALS

- 358 H. F. Wilcox: All oil, gas and other minerals in and under
40 acres being NE/4 NW/4 Section 28-16N-9E.
- 1685 Margaret Murphy, et vir: An undivided ¼ interest in and to all the oil, gas and other minerals in
and under
40 acres being SW/4 NE/4 Section 18-16N-10E.
- 2582 Dickson Oil Royalty Company: An undivided 4/55 interest in and to all the oil, gas and other minerals
in and under
55 acres being NE/4 SW/4, E/2 SE/4 SW/4, except W/2 SW/4 NE/4 SW/4, Section 17-14N-8E
- 2579 Dickson Oil Royalty Company: An undivided 1/32 interest in and to all the oil, gas and other minerals
in and under
80 acres being E/2 NW/4 Section 7-19N-7E.
- 62 A&B H. F. Wilcox, et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under
80 acres being S/2 NE/4 Section 13-16N-9E.
- 2577 Dickson Oil Royalty Company: An undivided 1/64 interest in and to all oil, gas and other minerals in
and under
160 acres being SW/4 Section 16-16N-10E.
- 2580 Dickson Oil Royalty Company: An undivided 1/16 interest in and to all the oil, gas and other minerals
in and under
40 acres being NW/4 SE/4 Section 20-17N-7E.
- 2581 Dickson Oil Royalty Company: An undivided 1/15 interest in and to all the oil, gas and other minerals
in and under
120 acres being S/2 NW/4, NW/4 NW/4, Section 16-16N-10E.

**NON-PRODUCING LEASES
CUSTER COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
3756	5-19-54	Leslie Comer, et ux	All interest in 160 acres being NE/4 Section 35-15N-14W	20	211
4714	9- 1-59	Rose Porter Raasch, et vir	All interest in 160 acres being N/2 SE/4 Section 19; N/2 SW/4 Section 20-14N-15W	132	270
4715	9- 2-59	T. M. Ray, et ux	¾ interest in 360 acres being S/2 and SE/4 NE/4 Section 5-14N-19W	135	548
	12-30-59	David G. Wadsworth, et ux	5/36 interest in 200 acres being SW/4 and SE/4 NE/4 and 40/288 interest in 160 acres being SE/4, all in Section 5-14N-19W	135	544
	10-26-59	J. B. Harvey, et ux	4/36 interest in 200 acres being SW/4 and SE/4 NE/4 and 23/288 interest in 160 acres being SE/4, all in Section 5-14N-19W	135	548
	12-30-59	Neva Luella Bader	1/32 interest in 160 acres being SE/4 Section 5-14N-19W	135	546
4726	7-27-60	Elmer E. Kayser, et ux	All interest in 160 acres being NW/4 Section 32-13N-16W	141	407
4781	2-16-61	T. M. Ray, et ux	All interest in 160 acres being S/2 SE/4 Section 15; N/2 NE/4 Section 22-15N-19W	146	496
5051	10-12-60	J. L. Davis, et al	All interest in 200 acres being E/2 SW/4; W/2 SE/4; SE/4 SE/4 Section 26-12N-20W	143	587
5061	10-12-61	Alvin J. Rennels, et ux	All interest in 160 acres being S/2 NE/4; SE/4 NW/4; NE/4 SW/4 Section 4-12N-20W	154	277
5092	2-16-61	James L. Sullivan, et ux	All interest in 160 acres being SW/4 Section 36-12N-18W	147	325
5419	4-18-63	Nelly M. Pitzer, et al	All interest in 400 acres being S/2; E/2 NW/4 Section 2-13N-14W	168	10
5998	6-19-57	Ray Harris, et ux	All interest in 160 acres being NE/4 Section 10-12N-15W	43	605
6000	6-18-57	I. E. Ratliff, et al	All interest in 160 acres being SE/4 Section 15-14N-16W	43	607
6001	6-18-57	I. E. Ratliff, et al	All interest in 160 acres being SE/4 Section 29-14N-16W	43	609
6002	6-21-57	G. P. Snider, et ux	All interest in 320 acres being W/2 Section 20-12N-18W	43	618
6003	6-21-57	G. P. Snider, et ux	¾ interest in 160 acres being NE/4 Section 36-13N-19W	43	611
6004	6-20-57	Edna Helen Klassen, et vir	All interest in 160 acres being SE/4 Section 26-12N-15W	43	619
6005	6-19-57	Ezra Sauer, et al	All interest in 160 acres being SE/4 Section 14-12N-15W	48	1
6018	7-10-57	Keith F. McClelland	All interest in 78.31 acres being Lots 6 and 7 (W/2 SW/4) Section 6-13N-14W	48	23
6056	7-19-57	Little Man (Mihate), et al Contract 14-20-205-1304	All interest in 160 acres being NE/4 Section 36-12N-17W	127	398
6233	5-11-60	Bert M. Phillips, et ux	15/16 interest in 240 acres being NE/4 and N/2 SE/4 Section 21-12N-20W	140	474
	5-11-60	Huff Kelly, et ux	1/16 interest in 240 acres being NE/4 and N/2 SE/4 Section 21-12N-20W	140	479

EXHIBIT C-2—Page 28

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6284	5-11-60	A. E. Richmond, et ux	All interest in 160 acres being NE/4 Section 30-12N-20W	140	482
6249	7-25-60	Adolph B. Kaiser, et ux	All interest in 160 acres being SE/4 Section 19-12N-15W	141	556
6267	1- 6-60	Samuel P. Tallman	All interest in 550 acres being N/2 NW/4 NE/4; W/2 NE/4 NE/4; E/2 SE/4 NE/4; NW/4 SE/4 NE/4, Section 34, N/2 NE/4, Section 35, NE/4; N/2 SE/4; N/2 SW/4; S/2 NW/4 Section 26-12N-19W	136	15
6284	7- 1-60	Grace E. Berrong, et vir	7.2541% interest in 160.08 acres being Lots 1 and 2 and S/2 NE/4 Section 1-13N-16W	142	65

**STATE OF OKLAHOMA
COUNTY OF CUSTER**

NON-PRODUCING MINERALS

- 2003 Thomas J. Bruce et ux: An undivided $\frac{1}{2}$ interest in and to all oil, gas and other minerals in and under 160.00 acres being S/2 SE/4 Section 5, N/2 NE/4 Section 8-13N-16W
- 2017 Nona B. Parks et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 20-14N-20W
- 2034 Joseph A. Winters et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160.00 acres being NE/4 Section 13-14N-17W
- 2047 C. M. Allison et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 200.00 acres being SE/4 SE/4 Section 27-13N-20W, E/2 NE/4, SW/4 NE/4, NE/4 SE/4 Section 34-13N-20W
- 2054 W. A. Trawick et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 29-15N-19W
- 2477 C. A. Strong et vir: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320.00 acres being SW/4 Section 3, E/2 SE/4 Section 4, N/2 NW/4 Section 10-14N-18W
- 2478 C. A. Strong et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 440.00 acres being S/2 SW/4 Section 22, W/2 SW/4, NE/4 SW/4 Section 27, NE/4 Section 28, W/2 NW/4 Section 34-15N-18W
- 2619 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
160.00 acres being Lots 1, 2, S/2 NE/4 Section 3-13N-18W
- 2620 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160.00 acres being NW/4 Section 27-15N-18W
- 2621 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160.00 acres being W/2 NE/4, NW/4 SE/4, NE/4 SW/4 Section 9-14N-19W
- 2622 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
80.00 acres being N/2 SW/4 Section 18-15N-19W
- 2623 Dickson Oil Royalty Company: an undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
80.00 acres being N/2 NE/4 Section 19-15N-19W
- 2624 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
80.00 acres being N/2 SE/4 Section 13-15N-20W

**NON-PRODUCING LEASES
DEWEY COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5746	6- 2-56	James M. Hall	All interest in 160 acres being SE/4 Section 14-18N-17W	89	32

**STATE OF OKLAHOMA
DEWEY COUNTY**

NON-PRODUCING MINERALS

- 1714 Frank Swantkoski: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being E/2 NE/4, E/2 SE/4 Section 35-19N-18W
- 1715 Lester M. Whitehead et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 80 acres being W/2 NE/4 Section 33-19N-18W
- 2018 E. W. Kauk et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 35-16N-20W
- 2133 W. H. Lothman et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being W/2 NW/4 Section 15; W/2 SW/4 Section 10-18N-19W
- 2180 A. B. Early Wray et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 240 acres being SE/4, E/2 SW/4 Section 27-19N-19W I.M.
- 2284 Geo. W. Jones: An undivided ½ interest in and to the oil, gas and other minerals in and under 2,320 acres being SE/4, E/2 SW/4, Section 13; E/2, N/2 NW/4, SE/4 NW/4, Section 24; NE/4, Section 25-17N-17W I.M.; SW/4 N/2 SE/4 Section 17; E/2 & S/2 SW/4, Section 18; all Section 19; N/2 NW/4 Section 20; Lot 1, NE/4 NW/4, NW/4 NE/4 Section 30-17N-18W I.M.
- 2498 George A. Harrison et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 238.40 acres being E/2 SE/4, Lot 4 and Lot 5, Section 28; Lot 1 and Lot 3, NE/4 NE/4 Section 33-17N-15W

**NON-PRODUCING LEASES
ELLIS COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6294	6-15-56	Wilber Fields, Adm.	All interest in 80 acres being W/2 NW/4 Sec. 15-22N-25W	81	341

**STATE OF OKLAHOMA
COUNTY OF ELLIS**

NON-PRODUCING MINERALS

- 2123 Maggie M. Enfield, et vir: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being Lots 2, 3, 4, 5, Section 6-21N-25W I.M.
- 2188 R. O. Renfrew, et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 240 acres being SW/4 NE/4, SE/4 NW/4, NE/4 SW/4, NW/4 SE/4, Section 29; S/2 NW/4, Section 33-19N-21W I.M.
- 2164 W. M. English, et ux: On undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being S/2 NE/4, NW/4 NE/4, Section 32; SW/4 NW/4, Section 33-17N-23W I.M.
- 2171 W. M. English, et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4, Section 27-23N-25W I.M.
- 2174 Jesse W. Foale et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 200 acres being SE/4 Section 6; NW/4 NW/4 (Lot 4), Section 5-22N-23W
- 2231 H. J. Schneider et al: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 7-22N-24W
- 2249 Freeman Morris et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4, Section 33-22N-26W
- 2256 Jennie White et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 400 acres being SE/4, E/2 SW/4, Lots 3 and 4, Section 18; W/2 SW/4 Section 17-22N-24W
- 2263 Ira Dolphus et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 440 acres being E/2 NW/4, S/2 NE/4, NW/4 SE/4, Section 19; SW/4, S/2 NW/4, Section 20-18N-22W
- 2265 Sarepta J. Huston: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 280 acres being W/2 NE/4, NE/4 NW/4, S/2 NW/4, N/2 SW/4, Section 25-18N-26W
- 2268 John R. Brown et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 400 acres being S/2 NE/4, Lots 1 and 2, Section 2-18N-26W; SE/4 NW/4, SW/4 NE/4, NW/4 SE/4, NE/4 SW/4, E/2 SE/4 Section 35-19N-26W
- 2530 Charles Bunn et ux: All interest in and to the oil, gas and other minerals in and under 440 acres being S/2 NE/4, SE/4 NW/4, S/2, Section 25-18N-24W
- 2583 Dickson Oil Royalty Company: An undivided $\frac{1}{4}$ interest in and to the oil, gas and other in and under 160 acres being SE/4 Section 9-21N-26W
- 2584 Dickson Oil Royalty Company: An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under 160 acres being S/2 NE/4, SE/4 NW/4, NE/4 SW/4, Section 25-22N-26W

**NON-PRODUCING LEASES
GARFIELD COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5722	4- 2-56	J. A. Zaloudek, et ux	All interest in 158.66 acres being Lots 3 and 4, S/2 NW/4 Sec. 5-23N-7W.	195	221
5876	11-19-56	Jennie B. Kindt	All interest in 160 acres being SW/4 Sec. 28-24N-8W.	203	384
5877	12- 3-56	Ida Pearl Dowers, et al	All interest in 160 acres being NW/4 Sec. 15-24N-7W.	204	558
5878	12- 3-56	Ida Pearl Dowers, et al	All interest in 160 acres being SW/4 Sec. 15-24N-7W.	204	555
5879	12- 7-56	Winton E. Conner, et ux	All interest in 160 acres being NE/4 Sec. 19-24N-7W.	205	11
5914	1-23-57	Theodore A. Eggers, et ux	All interest in 160 acres being NW/4 Sec. 9-21N-5W.	206	4
5915	2-11-57	Martha H. Blake, et vir	All interest in 160 acres being SE/4 Sec. 27-22N-6W.	206	224
5952	2-12-57	Roberta Bass, et vir	All interest in 369.30 acres being N/2, & a tract of land containing 49.30 acres, more or less, being in N/2 SE/4 Sec. 15-22N-7W, as more particularly described in the lease.	207	568
6364	1-13-62	Mr. C. E. Butts, et ux	All interest in 80 acres being S/2 NE/4 Sec. 28-21N-3W.	252	221
6365	1-13-62	Mrs. Ferrol E. Butts, et vir	All interest in 134.50 acres being N/2 NE/4 Sec. 28; N/2 NW/4, less approx. 20 acres, Sec. 27-21N-8W.	252	219
6540	6- 1-63	Bertha R. Carter, et vir	½ interest in 80 acres being E/2 NW/4 Sec. 23-21N-4W.	267	70
6541	3-13-63	Charles Sebranek, et ux	½ interest in 160 acres being SW/4 Sec. 14-21N-4W.	264	453
6542	2- 2-63	Calla Mae Marvin, et vir	½ interest in 160 acres being NE/4 Sec. 23-21N-4W.	262	489
6543	5-15-63	Ernest A. Kaiser, et ux	½ interest in 80 acres being W/2 NW/4 Sec. 23-21N-4W.	266	219
6545	1-17-62	Elsie V. Rosenbaum, et vir	½ interest in 80 acres being S/2 SW/4 Sec. 23-21N-4W.	257	610
6547	2-26-62	Charlie E. Cutter, et ux	½ interest in 80 acres being W/2 NE/4 Sec. 27-21N-4W. Subject to 1/32 of 7/8 ORI	253	318

**NON-PRODUCING LEASES
GRADY COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5196	8-15-62	Joe D. Sims, et al	¾ interest in 160 acres being NW/4 Sec. 26-7N-8W.	738	233
	8-15-62	Aetna Life Insurance Company, a Corporation	¾ interest in 160 acres being NW/4 Sec. 26-7N-8W.	738	235

**STATE OF OKLAHOMA
COUNTY OF GRADY**

NON-PRODUCING MINERALS

2090 E. B. Barton et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 71.80 acres being Lots 9, 10, 11, the North 1.75 acres and the Southeast 10 acres of Lot 12 Section 21-10N-5W

EXHIBIT C-2—Page 32

NON-PRODUCING LEASES GRANT COUNTY, OKLAHOMA

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5380	12-20-63	Miles Meloslav Klina et ux	All interest in 160 acres being SE/4 Section 28-28N-4W	206	64
5554	12-13-54	Julia Woodring et al	¼ interest in 157 acres being Lots 6 & 7; E/2 SW/4 Section 6-28N-3W	134	340
5729	4-20-56	Eunice E. Spencer et vir	All interest in 123.50 acres being Lots 6 & 7; E/2 SW/4 South & West of CL of Pond Creek, Section 6-25N-3W	146	188
5731	4-30-56	H. H. McKee	All interest in 236.00 acres being SW/4, Section 6, North & East of CL of Pond Creek, W/2 SE/4, Lots 8 & 9, Section 6; Lots 7 & 8, Section 7, with all accretions and reparian rights thereto, 25N-3W	146	140
5923	2- 7-57	Ethel H. Shannon	All interest in 160 acres being NW/4, Section 32-25N-7W	153	135
5943	3- 6-57	Walter Waldie et ux	All interest in 80 acres being E/2 SW/4, Section 35-27N-5W	153	466
5974	3- 7-57	Clyde E. Hergert et al	All interest in 152.29 acres being Lots 1 & 2, E/2 NW/4, Section 19-25N-6W	154	527
5975	3- 7-57	Elmer R. Hergert et al	All interest in 98.69 acres being Lots 3 & N/4 Lot 4, NE/4 SW/4, N. 10 acres SE/4 SW/4 Section 19-25N-6W	154	532
5976	3- 7-57	Glenn L. Hergert et al	All interest in 58.44 acres being S ¼ Lot 4, South 30 acres SE/4 SW/4 Section 19-25N-6W	154	530
6666	4- 8-64	Cecil W. Haws, et ux	All interest in 160 acres being SE/4 Section 25-27N-5W	—	—
6671	3-31-64	Martha J. Cunningham	All interest in 155.80 acres being Lot 1, NE/4 SW/4, S/2 SW/4, with all accretions and reparian rights thereto, Section 5-25N-3W	—	—

NON-PRODUCING LEASES HARPER COUNTY, OKLAHOMA

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5938	11- 6-56	The Federal Land Bank of Wichita	¼th interest in 240 acres being SE/4, E/2 SW/4, Section 4-25N-22W IM	100	358
5939	11- 6-56	The Federal Land Bank of Wichita	¼th interest in 160 acres being E/2 W/2, Section 9-25N-22W IM	100	361
6020	7-18-57	Clare W. Johnson	14/80ths interest in 80 acres being W/2 SW/4, Section 34-25N-23W	108	550
6139	6- 7-63	Hal Cooper et ux	½ interest in 160 acres being NW/4 Section 34-25N-22W	157	198
6155	1- 1-59	United States of America (NM-023827-Okla)	½ interest in 2816.46 acres being Section 19, East of Federal Hwy 183; S/2, NW/4 NW/4, NW/4 NE/4, S/2 NE/4, Section 20; N/2, Section 21; Section 29, East of Federal Hwy 183; Section 30, East of Federal Hwy 183; N/2 Section 32, East of Federal Hwy 183; W/2, less SW/4 SW/4; & W/2 E/2, & E/2 E/2, West of Public Road, Section 33-25N-22W	—	—
6535	4- 1-63	Anna J. Martin	All interest in 175.906 acres being S/2, Section 32-25N-22W, lying East of State Hwy No. 34 (US183)	156	280
6559	12-29-61	Scott W. Hovey et al	½ interest in 640 acres being Section 36-25N-23W	146	341

EXHIBIT C-2—Page 33

**STATE OF OKLAHOMA
COUNTY OF HARPER**

NON-PRODUCING MINERALS

- 1720 C. A. Lynch: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being NE/4 Section 5-25N-23W.
- 1858 D. E. Beaty, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320 acres being SE/4 Section 14, SE/4 Section 22-25N-26W.
- 2066 J. E. O'Donnell: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320 acres being SE/4 SE/4 Section 8, NE/4 NE/4 Section 17, S/2 SW/4, NW/4 SE/4, W/2 NE/4, NE/4 NE/4 Section 9-27N-23W.
- 2067 Irving T. Honnold: An undivided $\frac{1}{2}$ interest in and to all oil, gas and other minerals in and under 40 acres being SW/4 SE/4 Section 9-27N-23W.
- 2102 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 156 acres, being NE/4 Section 17-28N-21W, except 4 acres deeded to Evangelical Lutheran Zions Church by Instrument recorded in Book 12 of Deeds, at page 329.
- 2103 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being Lots 3, 4, S/2 NW/4 Section 1-28N-22W.
- 2125 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 240 acres being S/2 NE/4, SE/4 Section 31-29N-21W.
- 2137 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being NE/4 Section 8-28N-21W.
- 2146 Kenneth O. Huff, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
820 acres being W/2 Section 28-28N-21W.
- 2147 Charles C. Crissup: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being NE/4 Section 21-27N-21W.
- 2150 William J. Zander, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160 acres being E/2 NW/4, W/2 NE/4 Section 25-27N-22W.
- 2154 John D. Wilson, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being SE/4 NW/4, E/2 SW/4, SW/4 SE/4 Section 4-27N-20W.
- 2169 J. O. Selman, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 169.21 Acres being Lots 4, 5, 6 and 7 Section 6-25N-21W.
- 2170 Robert G. Rogers, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160 acres being NW/4 Section 23-29N-22W.
- 2362 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
1960.00 acres being S/2 SE/4 Section 15, S/2, NW/4 Section 22, all Section 26, E/2, SW/4 Section 27, E/2 NW/4, NW/4 NW/4, NE/4 Section 35-25N-22W.
- 2363 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
3621.00 acres being S/2 NW/4, Section 15, all of Section 16, Lots 1, 2, E/2 NW/4, NE/4 Section 19, NW/4 NW/4, W/2 NE/4, SE/4 NE/4, SE/4 Section 20, NE/4 Section 21, all Section 29, all Section 31, N/2 Section 32, E/2 SW/4, NW/4, NW/4 SW/4, E/2 Section 33-25N-22W, except a tract of land containing 99.00 acres in the E/2 Section 33-25N-22W which was conveyed to Irish Syndicate Live Stock and Loan Company by Quit Claim Deed dated June 13, 1938, by and between H. F. Wilcox Oil and Gas Company, party of the first part, and Irish Syndicate Live Stock and Loan Company, party of the second part.

- 2364 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
4000.00 acres being S/2 Section 4, S/2 Section 5, all Section 8, NE/4, N/2 SE/4, N/2 NW/4, S/2 SW/4 Section 9, E/2 SW/4, W/2 SE/4 Section 10, NW/4, W/2 SW/4 Section 14, all of Sections 15, 16, and 17-25N-23W.
- 2365 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
3140.00 acres being all of Sections 20 and 21, W/2, E/2 SE/4, SW/4 SE/4, Section 22, NE/4, E/2 NW/4, NW/4 NW/4, N/2 SW/4 NW/4 Section 27, all Section 28, N/2, S/2 S/2 Section 29-25N-23W.
- 2366 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
3440.00 acres being E/2 SE/4 Section 14, all Section 23, E/2, SW/4 Section 24, all of Sections 25 and 26, NE/4, E/2 NW/4, NW/4 NW/4, NE/4 SE/4 Section 35, all Section 36-25N-23W.
- 3094 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
1440.00 acres being NW/4 Section 21, SW/4 Section 20, all Section 30-25N-22W, NW/4 Section 24-25N-23W, S/2 Section 19-25N-22W.

NON-PRODUCING LEASES HASKELL COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5898	1-15-57	J. W. Banker, et ux	All interest in 160.00 acres being NE/4 Sec. 20-7N-22E.	173	229
5899	1- 8-57	East Oklahoma Royalties, Inc., et al	All interest in 212.50 acres being SE/4, SE/4 SW/4, E/2 E/2 SW/4 SW/4, NW/4 NE/4 SW/4 SW/4 Sec. 25-8N-20E.	173	231
5900	1- 9-57	W. J. Martin, et al	$\frac{1}{2}$ interest in 160.00 acres being SE/4 Sec. 31-8N-21E.	173	233
	1- 9-57	Carl K. Rose, et al	$\frac{1}{2}$ interest in 160.00 acres being SE/4 Sec. 31-8N-21E.	173	235
5901	1- 8-57	Helen L. Williams	160/380 interest in 380.00 acres being W/2 NE/4, NW/4, W/2 NE/4 SW/4, SE/4 SW/4, W/2 SW/4 Sec. 36, All interest in 185.00 acres being NW/4 NW/4 NE/4, W/2 NE/4 NW/4 NE/4, NE/4 SE/4, E/2 NW/4 SE/4, N/2 SE/4 SE/4, SW/4 SE/4 SE/4, S/2 SW/4 SE/4, W/2 SE/4 SW/4, SW/4 SW/4 Sec. 35-8N-22E.	173	237
5902	1- 8-57	Tom Bailes, et ux	All interest in 240.00 acres being SW/4, W/2 SE/4 Sec. 33-9N-21E.	173	239
5903	1-14-57	Wendell Bonham, et ux	All interest in 149.50 acres being S/2 S/2 less 10.50 acres in SE/4 SE/4, all being in Sec. 12-9N-22E.	173	241
5904	1-14-57	Samuel N. Kennon	All interest in E/2 NW/4 NW/4 SW/4, NE/4 NW/4 SW/4, S/2 NW/4 SW/4, NE/4 SW/4, S/2 SW/4 Sec. 25, NW/4 Sec. 36-10N-20E.	173	243
5905	1-14-57	Louis Foitek, et ux	All interest in 480.00 acres being NW/4 Sec. 15, N/2 Sec. 16-10N-21E.	173	245
5906	1-11-57	Lee H. Tyler, et ux	All interest in 210.00 acres being S/2 NE/4, W/2 SE/4, W/2 SE/4 SE/4, NE/4 NE/4 SE/4 Sec. 13-10N-22E.	173	247

EXHIBIT C-2—Page 35

5907	1-11-57	Lee H. Tyler, et ux	All interest in 190.00 acres being NW/4, N/2 NW/4 SW/4, SW/4 NW/4 SW/4 Sec. 13-10N-22E.	173	249
5908	1- -8-57	Carl K. Rose, et al	All interest in 170.00 acres being S/2 NW/4, SE/4 SW/4, S/2 NE/4 SW/4, W/2 SW/4 SE/4, SW/4 NW/4 SE/4 Sec. 1-10N-22E.	173	251
5909	1- 8-57	Carl K. Rose, et al	½ interest in 160.00 acres being SE/4 Sec. 85, all interest in 120.00 acres being N/2 SW/4, SW/4 SW/4 Sec. 86-11N-22E.	173	253
	1- 8-57	The Federal Land Bank of Wichita	½ interest in 160.00 acres being SE/4 Sec. 85-11N-22E.	177	224
5910	1- 8-57	Jack Rose and Carl K. Rose, Trustees, et al	All interest in 357.89 acres being Lots 1, 2, 3, 4, S/2 NE/4 Sec. 1-10N-22E, W/2 SE/4, SE/4 SW/4 Sec. 36-11N-22E.	173	255
5911	1- 8-57	Jack Rose and Carl K. Rose, Trustees	All interest in 404.74 acres being W/2 SE/4, S/2 NW/4, SW/4 NE/4 Sec. 12, all that part of SE/4 Sec. 11 lying north of south line of Midland Valley R.R. R/W and all that part SW/4 Sec. 12 lying north of south line of Midland Valley R.R. R/W, all being in 9N-20E.	173	257
5912	1- 8-57	East Oklahoma Royalties, Inc., et al	13/16 interest in 580.00 acres being E/2 SE/4, NW/4 SE/4, NE/4 SW/4 SE/4 Sec. 10, SW/4 Sec. 11, SW/4, E/2 NW/4, SW/4 NW/4, SE/4 NW/4 NW/4 Sec. 14-11N-21E.	173	259
	1- 8-57	Zelah Campbell, et al	3/16 interest in 580.00 acres being E/2 SE/4, NW/4 SE/4, NE/4 SW/4 SE/4 Sec. 10, SW/4 Sec. 11, SW/4, E/2 NW/4 SW/4 NW/4, SE/4 NW/4 NW/4 Sec. 14-11N-21E.	173	261
6409	1-12-57	Lynn May et ux	All interest in 80.00 acres being N/2 SE/4 Section 26-8N-22E	174	357
6410	1-18-57	Hugh D. Brown et ux	All interest in 80.00 acres being Lot 2, SW/4 NE/4 Section 1-7N-22E	174	369
	1-18-57	R. T. Shaw et ux	All interest in 80.00 acres being Lot 2, SW/4 NE/4 Section 1-7N-22E	175	307

NON-PRODUCING LEASES HUGHES COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6186	5-19-58	Mrs. Letha L. Reed et ux	51/60th interest in 60 acres being S/2 SE/4 SE/4 Section 24; NE/4 NE/4, Section 25-5N-11E	281	278
	6-23-59	G. G. Jones et al	8.4/60ths interest in 60 acres being S/2 SE/4 SE/4 Section 24 and NE/4 NE/4 Section 25-5N-11E	296MS	167
The above leases subject to Gas Purchase Contract dated July 18, 1960 between Oklahoma Natural Gas Company, as Buyer, and Wilcox Oil Company, as Seller.					
6665	3-31-64	Lottie Loftis et vir	All interest in 183.30 acres being Lots 1 & 2, S/2 NE/4, E/2 SE/4 NW/4 Section 1-4N-11E	362	301
6667	4- 2-64	Paul Balinger, et al	All interest in 170 acres being NW/4, SW/4 SW/4 NE/4 Section 25-4N-10E	MS362	425
6669	4-22-64	Jim Shirley et ux	1/6th interest in 50 acres being NW/4 NW/4, NW/4 NE/4 NW/4, Section 15-4N-11E		

EXHIBIT C-2—Page 36

**STATE OF OKLAHOMA
COUNTY OF HUGHES**

NON-PRODUCING MINERALS

- 1164 Floyd O. Howarth Oil and Gas Company: An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
160 acres being SE/4 Section 20-8N-10E.
- 3857 John E. Turner, et ux: An undivided 24/160 interest in and to the oil, gas and other minerals in and under
160 acres being SE/4 Section 28-9N-9E.

**STATE OF OKLAHOMA
COUNTY OF KAY**

NON-PRODUCING MINERALS

- 2585 Dickson Oil Royalty Company: An undivided 1/80 interest in and to the oil, gas and other minerals in and under
40 acres being SE/4 NE/4 Section 84-25N-1W.
- 2586 Dickson Oil Royalty Company: An undivided 1/960 interest in and to the oil, gas and other minerals in and under
160 acres being NW/4 Section 84-25N-1W.

**NON-PRODUCING LEASES
KINGFISHER COUNTY, OKLAHOMA**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5978	3- 8-57	R. A. Frakes, et ux	All interest in 160 acres being NW/4 Section 10-16N-7W	165	589
5979	3- 8-57	Wilford Snethen, et ux	All interest in 160 acres being SE/4 Section 8-16N-7W	165	591
6019	8- 3-57	Peter Yost, et ux	All interest in 160 acres being SW/4 Section 20-16N-8W	169	614
6338	7-12-61	State of Oklahoma (Ls. No. 37-CS-8943)	4.22768% interest in 160 acres being NE/4 Section 36-19N-9W	—	—
6617	12-17-58	G. L. Carey	3.9607900% interest in 160 acres being SW/4 Section 17-18N-5W, I.M., Subj. to 1/16 of 7/8 O. R. I.	180	9
6618	4-14-63	Joe O. Kochenower, et ux	3.96079% interest in 160 acres being SE/4 Section 36-17N-9W, I.M., Subj. to 1/16 of 7/8 O. R. I.	246	460
6650	1-15-64	Thurman L. Hayes, et ux	40% interest in 1.00 acre, more or less, being in the SE/4 SW/4 Section 10-16N- 7W, as more particularly described in lease.	258	147
6651	2- 4-64	Minnie Mae Toulson	40% interest in 8.00 acres being in SE/4 SW/4 Section 10-16N-7W, as more partic- ularly described in lease.	259	125
6652	1-14-64	Elmer S. Boyd, et al	40% interest in 4.25 acres being in SE/4 SW/4 Section 10-16N-7W, more partic- ularly described in lease.	259	127
6653	1-13-64	Sylvan E. Frederich, et ux	40% interest in 0.75 acres, more or less, being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	259	180
6654	1-22-64	Andrew L. Sage, et ux	40% interest in 5/8ths acre, more or less, being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	259	132

EXHIBIT C-2—Page 37

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6655	1-14-64	George H. Glessner, et ux	40% interest in 1.00 acre, more or less, being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	259	134
6656	1-22-64	Mearline Bates	40% interest in 13.43 acres being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	258	138
6657	1-15-64	Charles L. Hobbs, et ux	40% interest in 2.50 acres being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	258	140
6658	1-21-64	Marjorie Ruth Lietzke, et vir	40% interest in 3.00 acres being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	258	142
6659	1-22-64	Earnest Burnett, et ux	40% interest in 3.75 acres being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	258	144

NON-PRODUCING LEASES KIOWA COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6244	6-14-60	Department of Interior Bureau of Indian Affairs (Contract No. 14-20-206-18266)	All interest in 160 acres being SW/4 Section 1-7N-14W	380	449

NON-PRODUCING LEASES LEFLORE COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6411	1-25-57	C. H. Barry et ux	½ interest in 120 acres being N/2 SE/4 & SE/4 SE/4 Section 31-8N-23E	340	583

NON-PRODUCING LEASES LINCOLN COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
1552	7-10-26	J. B. Angel et ux	All interest in 80 acres being W/2 SW/4 Section 35-14N-6E	72	185
5399	3- 3-52	W. Eugene Springer	5/16 interest in 80 acres being N/2 SW/4 Section 10-15N-4E, Subject to 5/16 of 1/8 of 7/8 ORI	200	326

STATE OF OKLAHOMA COUNTY OF LINCOLN

NON-PRODUCING MINERALS

2330	J. J. Lancaster: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 7-13N-2E.
2525	George G. Travis: An undivided ¾ interest in and to the oil, gas and other minerals in and under 80 acres being N/2 NE/4 Section 14-12N-3E.
3320	Martha Murphy: An undivided 1/16 interest in and to the oil, gas and other minerals in and under 80 acres being E/2 NW/4 Section 18-14N-6E.
5253	C. M. Cade, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 80 acres being N/2 SW/4 Section 4-12N-3E.

EXHIBIT C-2—Page 38

**STATE OF OKLAHOMA
COUNTY OF LOGAN**

NON-PRODUCING MINERALS

- 2155 H. F. Elsey et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 80 acres being E/2 SW/4, Section 2-15N-1E I.M.
- 2560 Glen C. Ault et ux: An undivided $\frac{1}{5}$ interest in and to the oil, gas and other minerals in and under 160 acres being W/2 SW/4 Section 17; W/2 SE/4 Section 18-17N-4W

**NON-PRODUCING LEASES
MAJOR COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5033	10-26-61	James Petroleum Corp.	$\frac{1}{4}$ interest in 160 acres being NE/4 Section 16-20N-16W	228	227
	10-30-61	Elmer R. Livingston	1/16 interest in 160 acres being NE/4 Section 16-20N-16W	228	231
	10-24-61	A. Pepis	1/16 interest in 160 acres being NE/4 Section 16-20N-16W	228	229
	11-22-61	H. A. Horwitz	13/160 interest in 160 acres being NE/4 Section 16-20N-16W	228	233
	11- 3-61	Julius Horwitz	7/160 interest in 160 acres being NE/4 Section 16-20N-16W	228	235
5481	10-20-65	Jonathan H. Smith et ux	All interest in 160 acres being NE/4 Section 22-21N-13W	156	319
5537	9-28-54	Elden K. Barnum et ux	All interest in 160 acres being SE/4 Section 16; an undivided $\frac{1}{2}$ interest in 160 acres being W/2 W/2 Section 20-22N-13W	156	53
5621	7-11-55	Jessee E. Howard et ux	All interest in 160 acres being SW/4 Section 27-23N-12W	160	349
5960	3- 2-57	Ethel M. Fahey et vir	All interest in 160 acres being NE/4 Section 18-20N-9W I.M.	179	385
5963	3- 4-57	Harvey B. Hammer et ux	All interest in 370 acres being S/2, NE/4 South & East of RR R/W, Section 12-20N-10W I.M.	179	549
5484	10-22-54	J. C. Abbott et ux	All interest in 160 acres being SE/4 Section 2-21N-13W	156	389

**STATE OF OKLAHOMA
COUNTY OF MAJOR**

NON-PRODUCING MINERALS

- 1717 C Hudspeth: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 161.10 acres being Lot 2 Section 10; N/2 NE/4 Section 15; NW/4 NW/4 Section 14-22N-13W.
- 1718 S. D. McReynolds: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 2-20N-15W.
- 2167 C. A. Lynch: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 25-23N-11W.
- 2175 Thomas R. Libby, et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 36-23N-11W.
- 2553 W. H. Cobbs: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being W/2 NE/4, W/2 SE/4 Section 26-20N-15W

**STATE OF OKLAHOMA
COUNTY OF McINTOSH**

NON-PRODUCING MINERALS

2587 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
80 acres being W/2 NW/4 Section 30-9N-14E

**STATE OF OKLAHOMA
COUNTY OF NOBLE**

NON-PRODUCING MINERALS

2590 Dickson Oil Royalty Company: An undivided 11088/257400 interest in and to the oil, gas and other minerals in and under
160 acres being SE/4 Section 2-24N-1W.

2589 Dickson Oil Royalty Company: An undivided $\frac{1}{39}$ interest in and to the oil, gas and other minerals in and under
160 acres being SW/4 Section 2-24N-1W.

**NON-PRODUCING LEASES
OKFUSKEE COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
3856	4- 5-19	Shawnee Severs #38772 I27 ind. 2352	All interest in 40 acres being SE/4 NW/4 Section 31-11N-10E	B-50	666

**STATE OF OKLAHOMA
COUNTY OF OKFUSKEE**

NON-PRODUCING MINERALS

1222 Floyd O. Howart Oil and Gas Company: An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
100 acres being S/2 SW/4 SW/4 Section 4; W/2 NW/4 Section 9-12N-9E.

1234 Floyd O. Howart Oil and Gas Company: An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
80 acres being W/2 SE/4 Section 15-13N-10E.

2591 Dickson Oil Royalty Company: An undivided $\frac{1}{10}$ interest in and to the oil, gas and other minerals in and under
40 acres being NW/4 NW/4 Section 26-13N-10E.

2592 Dickson Oil Royalty Company: An undivided $\frac{7}{320}$ interest in and to the oil, gas and other minerals in and under
160 acres being S/2 SE/4 Section 22; N/2 NE/4 Section 27-13N-10E.

6620 Dorcas F. Chapman, et vir: A full interest in and to the oil, gas and other minerals in and under
40 acres being SW/4 SE/4 Section 25-10N-9E.

**NON-PRODUCING LEASES
OKMULGEE COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
13	3- 5-18	Peter Coleman, et ux	All interest in 80 acres being W/2 SE/4 Section 34-15N-11E	M139	423

**STATE OF OKLAHOMA
COUNTY OF OKMULGEE**

NON-PRODUCING MINERALS

2593 Dickson Oil Royalty Company: An undivided $\frac{1}{40}$ interest in and to all the oil, gas and other minerals in and under
40 acres, being E/2 E/2 SW/4 Section 21-14N-11E

EXHIBIT C-2 — Page 40

**STATE OF OKLAHOMA
COUNTY OF PAWNEE**

NON-PRODUCING MINERALS

- 2596 Dickson Oil Royalty Company: An undivided 3/320 interest in and to all of the oil, gas and other minerals in and under
120 acres being N/2 SE/4 & SW/4 SE/4 Section 26-20N-8 E

**STATE OF OKLAHOMA
COUNTY OF PAYNE**

NON-PRODUCING MINERALS

- 2536 Martha E. Stage: An undivided 1/32 interest in and to all of the oil, gas and other minerals in and under
160 acres being SW/4 Section 8-19N-1W
- 3866 Dick Ross: An undivided 15/120 interest in and to all of the oil, gas and other minerals in and under
120 acres being S/2 SW/4 and NE/4 SW/4 Section 29-19N-6E

**STATE OF OKLAHOMA
COUNTY OF POTTAWATOMIE**

NON-PRODUCING MINERALS

- 980 L. Medlin: An undivided 1/16 interest in and to all of the oil, gas and other minerals in and under
160 acres being E/2 NE/4 Section 7 and W/2 NW/4 of Section 8-8N-3E
- 996 J. C. Cooke Oil & Gas Co.: An undivided 1/2 interest in and to all of the oil, gas, coal and other minerals in and under
160 acres being NW/4 Section 21-11N-5E
- 1631 J. J. Lancaster: An undivided 3/32 interest in and to all of the oil, gas and other minerals in and under
160 acres being NW/4 of Section 17-9N-5E
- 2528 Geo. M. McDaniel: An undivided 1/16 interest in and to all of the oil, gas and other minerals in and under
80 acres being N/2 NE/4 Section 22-6N-3E
- 2604 Dickson Oil Royalty Company: An undivided 1/320 interest in and to all of the oil, gas and other minerals in and under
160 acres being all of the SE/4 Section 17-8N-5E
- 2606 Dickson Oil Royalty Company: An undivided 3/40 interest in and to all of the oil, gas and other minerals in and under
The North 53 1/2 acres of the W/2 SW/4 Section 12-8N-4E
- 2607 Dickson Oil Royalty Company: An undivided 3/320 interest in and to all of the oil, gas and other minerals in and under
160 acres, being all of the NW/4 Section 32-8N-4E
- 2608 Dickson Oil Royalty Company: An undivided 3/160 interest in and to all of the oil, gas and other minerals in and under
26 1/2 acres being the South 26 1/2 acres of W/2 SW/4 Section 12-8N-4E
- 2609 Dickson Oil Royalty Company: An undivided 1/48 interest in and to all of the oil, gas and other minerals in and under
60 acres being SW/4 NW/4 and W/2 SE/4 NW/4 Section 4-8N-4E
- 2610 Dickson Oil Royalty Company: An undivided 1/50 interest in and to all of the oil, gas and other minerals in and under
100 acres being NW/4 SE/4, SW/4 NE/4 and S/2 SE/4 NE/4 Section 31-9N-4E
- 4948 Hazel A. Smallhorn: An undivided 1/160 interest in and to all of the oil, gas and other minerals in and under
80 acres being N/2 NW/4 Section 28-6N-3E
- 5159 Jack W. Page: An undivided 1/320 interest in and to all of the oil, gas and other minerals in and under
160 acres being SE/4 Section 8-8N-5E
- 5202 L. O. Carter Oil Company: An undivided 3/160 interest in and to all of the oil, gas and other minerals in and under
160 acres being SE/4 Section 17-7N-8E

**NON-PRODUCING LEASES
ROGER MILLS COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6030	7-19-57	Apple Woman (Contract #14-20-205-1305)	All interest in 160 acres being SE/4 Section 26-14N-21W	31	35
6070	7-19-57	Jonathan Red Bird et al (Contract #14-20-205-1306)	All interest in 160 acres being SE/4 Section 33-14N-21W	—	—
6122	4-9-58	L. O. Robinson et al	All interest in 558.50 acres being N/2, SW/4, N/2 SE/4, except 1.50 acres in NW/4 SW/4 SW/4 and 1/2 interest 80.00 acres being S/2 SE/4, Section 25-13N-22W	21	149
	10-11-63	Maye E. Harrison	1/2 interest in 80 acres being S/2 SE/4 Section 25-13N-22W	53	566

**STATE OF OKLAHOMA
COUNTY OF ROGER MILLS**

NON-PRODUCING MINERALS

- 2236 L. L. Cheever: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 151.66 acres being Lot 8, Section 6; Lot 1, Section 7-16N-24W I.M.; N/2 NE/4 Section 12-16N-25W I.M.
- 2250 A. G. Gray: An undivided 1/2 interest in the oil, gas and other minerals in and under 80 acres being E/2 SE/4 Section 10-16N-26W I.M.
- 2259 Edd Parvin et ux: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being S/2 NW/4, N/2 SW/4 Section 10-16N-22W
- 2271 J. W. Dutton: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 400 acres being NE/4, N/2 SE/4, E/2 NW/4, SW/4 NW/4, NW/4 SW/4 Section 22-13N-23W I.M.
- 2282 A. G. Gray: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 SE/4, less 0.50 acre along West side, Section 3; N/2 NE/4, SW/4 NE/4, Section 15-15N-23W I. M.
- 2314 A. G. Gray: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being S/2 SW/4 Section 17; N/2 NW/4 Section 20-16N-26W I.M.
- 2315 J. L. King et ux: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 35-15N-25W I.M.
- 2328 E. E. Davenport: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being W/2 NE/4, SE/4 NE/4, NE/4 NW/4, Section 28-15N-22W
- 2329 E. E. Davenport: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 NW/4, N/2 SW/4, SE/4 SW/4 Section 28-15N-22W
- 2350 E. E. Davenport: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 28-16N-26W
- 2397 Louisa Keller et vir: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 400 acres being W/2, SW/4 SE/4, Section 26; NE/4 NE/4 Section 27-16N-26W I.M.
- 2455 F. P. Thorne, et ux: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 240 acres being W/2 NW/4, Section 3; E/2 NE/4 Section 4; N/2 SW/4 Section 19-15N-21W
- 2550 W. H. Cobbs: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being NE/4 Section 15-16N-26W
- 2625 Dickson Oil Royalty Company: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being Lot 4, Section 2; Lot 1, Section 3-14N-22W; S/2 SW/4, Section 35-15N-22W
- 2626 Dickson Oil Royalty Company: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 120 acres being S/2 NE/4, NE/4 SE/4 Section 23-15N-22W

EXHIBIT C-2—Page 42

- 2627 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
160 acres being N/2 SW/4 Section 7-14N-21W; E/2 SE/4 Section 12-14N-22W
- 2628 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
160 acres being SW/4 Section 34-15N-21W
- 2629 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
40 acres being NW/4 NW/4 Section 14-14N-21W

**STATE OF OKLAHOMA
COUNTY OF SEMINOLE**

NON-PRODUCING MINERALS

- 2615 Dickson Oil Royalty Company: An undivided $\frac{1}{80}$ interest in and to all the oil, gas and other minerals in and under
80.00 acres being E/2 SE/4 Section 24-8N-5E
- 979 L. Medlen: An undivided $\frac{1}{24}$ interest in and to all the oil, gas and other minerals in and under
120.00 acres being N/2 NE/4, SW/4 NE/4 Section 25-9N-5E
- 2614 Dickson Oil Royalty Company: An undivided $\frac{1}{120}$ interest in and to all the oil, gas and other minerals in and under
120.00 acres being S/2 SW/4, NE/4 SW/4 Section 11-8N-5E

**STATE OF OKLAHOMA
COUNTY OF STEPHENS**

NON-PRODUCING MINERALS

- 930 J. C. Cooke Oil & Gas Co.: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
153.21 acres being Lots 3, 4, E/2 SW/4 Section 19-2S-4W
- 946 J. C. Cooke Oil & Gas Co.: An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in and under
40.00 acres being NW/4 SE/4 Section 5-3S-4W

**NON-PRODUCING LEASES
WASHITA COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6044	7- 5-57	Marybelle (Curtis) Lone Bear — Contract 14-20-205-1230	All interest in 160.00 acres being SE/4 Sec. 8-11N-17W.	305	257
6190	10- 8-59	M. A. Prichard, et ux	All interest in 80.00 acres being E/2 NE/4 and ½ interest in 80.00 acres being W/2 NE/4 Sec. 33-8N-15W.	305	445
6193	10- 8-59	Preston A. Godfrey, et ux	All interest in 240.00 acres being SW/4 Sec. 27, E/2 SE/4 Sec. 28-8N-15W.	305	443
6229	5-17-60	Bret Record, et ux	All interest in 160.00 acres being SE/4 Sec. 21-8N-15W.	305	455
6230	5-18-60	R. M. Kobs, et al	All interest in 160.00 acres being SE/4 Sec. 33-9N-15W.	305	461
6231	5-18-60	R. M. Kobs, et al	½ interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	457
	5-18-60	E. M. Bradbury, et ux	1/6 interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	471
	5-18-60	Gladys L. Butterfield, et vir	1/6 interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	467
	5-18-60	Margaret E. Daniels	1/6 interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	469
6250	6-22-60	Fred Wheeler, et al Contract 14-20-0206-18270	All interest in 145.60 acres being Lot 5 in NW/4, Lot 1 in SE/4, Lot 4 in SW/4 Sec. 35-8N-14W.	305	263
6258	6-22-60	Flora Satepeahtaw, et al Contract 14-20-0206-18271	All interest in 162.55 acres being Lot 1 of SE/4 Sec. 34, Lots 3, 4, 5, 6, SW/4 SW/4 Sec. 35-8N-14W.	305	265
6263	7-28-60	James E. Derryberry, et ux	All interest in 160.00 acres being S/2 SW/4, W/2 SE/4 Sec. 16-8N-14W.	307	619
6268	9-10-60	Harvey Schmidt, et al	All interest in 160.00 acres being SW/4 Sec. 8-8N-14W.	307	623
6269	9- 6-60	L. B. Weidenmaier, et ux	½ interest in 160.00 acres being SW/4 Sec. 22-8N-14W.	315	251
6275	3-19-60	Prudie Two Crows — Contract #14-20-205-2222	All interest in 160.00 acres being NE/4 Sec. 19-10N-16W.	305	261
6277	1-13-61	Charlie McCornack, Jr., et ux	All interest in 80.00 acres being E/2 NE/4 Sec. 31-9N-15W.	305	485
6283	1-13-61	Minnie Lee Harrison	All interest in 80.00 acres being N/2 NE/4 Sec. 30-9N-15W.	305	489
4550	6-19-58	Carl F. Kayser, et ux	All interest in 160.00 acres being SE/4 Sec. 14-11N-17W.	298	41
4551	6- 9-58	Eddie H. Kayser	All interest in 320.00 acres being W/2 Sec. 22-11N-17W.	298	39
4590	9-24-58	George W. Reimer, et ux	All interest in 160.00 acres being SE/4 Sec. 23-11N-16W.	298	59
4591	9-23-58	Henry J. Vogt, et ux	All interest in 160.00 acres being SW/4 Sec. 26-10N-15W.	298	57
4596	9-24-58	George W. Reimer, et ux	All interest in 160.00 acres being NE/4 Sec. 17-11N-16W.	298	55

EXHIBIT C-2—Page 44

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
4731	5-17-60	Ollie Nix, et vir	All interest in 80.00 acres being E/2 SW/4 Sec. 28-9N-14W.	305	463
	5-17-60	Bessie Fletcher, et vir	All interest in 80.00 acres being W/2 SW/4 Sec. 28-9N-14W.	305	465
5050	10- 8-59	Maud Chappellear	All interest in 160.00 acres being NW/4 Sec. 1-8N-16W.	305	433
5063	2-13-61	Emil Gemaehlich	All interest in 240.00 acres being S/2 SE/4, SW/4 Sec. 4-10N-18W.	305	497
5064	1-10-61	Charlie McCornack, Jr., et ux	All interest in 80.00 acres being S/2 NE/4 Sec. 30-9N-15W.	305	477
5069	2-14-61	Margaret Horn	All interest in 160.00 acres being SW/4 Sec. 17-9N-16W.	305	505
5070	1-10-61	Charlie Maupin	½ interest in 80.00 acres being W/2 NE/4 Sec. 18-9N-15W.	305	481
5072	1-13-61	Leo George Vogt, et ux	All interest in 80.00 acres being W/2 SE/4, ½ interest in 80.00 acres being E/2 SW/4 Sec. 11-9N-15W.	305	491
5079	1-10-61	Charlie Maupin	½ interest in 157.64 acres being Lots 1, 2, E/2 NW/4 (NW/4) Sec. 18-9N-15W.	305	479
5080	10- 8-59	Albert W. Cooper, et ux	All interest in 80.00 acres being E/2 SE/4 Sec. 11-8N-15W.	305	435
5081	2-14-61	O. L. Megli, et ux	All interest in 80.00 acres being S/2 NE/4 Sec. 14-11N-14W.	305	501
5082	2-14-61	O. L. Megli, et ux	All interest in 160.00 acres being SE/4 Sec. 14-11N-14W.	305	495
5087	1-10-61	J. M. Price, et ux	All interest in 160.00 acres being SE/4 Sec. 20-9N-15W.	305	475
5094	1-10-61	Barney L. Brence, et ux	All interest in 160.00 acres being NW/4 Sec. 20-9N-15W.	305	487
5110	10- 6-59	Lester A. Richey, et ux	All interest in 308.45 acres being Lots 1, 2, E/2 NW/4, NE/4 Sec. 7-8N-15W.	305	453
5111	1-12-61	Ed Huebert, et ux	All interest in 160.00 acres being SW/4 Sec. 29-10N-15W.	305	473
5174	2-14-61	Edward Mulder, et al	All interest in 160.00 acres being Lots 3, 4, S/2 NW/4 Sec. 1-9N-14W.	305	493
5175	2-14-61	Cora Mae Bennett Stratton, et al	All interest in 160.00 acres being SE/4 Sec. 1-9N-14W.	305	499
5177	10- 6-59	Edd J. Mandrell, et ux	All interest in 80.00 acres being S/2 NW/4 Sec. 12-8N-15W.	305	441
5289	1- 9-63	Alfred Stehr, et ux	All interest in 160.00 acres being NW/4 Sec. 13-11N-17W.	305	511
6010	6-28-57	John Bergen, et ux	All interest in 160.00 acres being NE/4 Sec. 1-11N-15W.	289	67
6036	7- 5-57	Standing Woman Contract 14-20-205-1223	All interest in 72.90 acres being Lots 6 & 7 in SW/4 Sec. 6-11N-16W.	—	—
6037	7- 5-57	Walking Ahead Contract 14-20-205-1227	All interest in 92.95 acres being W/2 W/2 Lot 3, W/2 W/2 SE/4 NW/4 & Lots 4, 5 of NW/4 Sec. 6-11N-16W.	—	—
5071	1-10-61	William W. Maupine et ux	½ interest in 80 acres being E/2 NE/4 Section 18-9N-15W.	305	483

EXHIBIT C-2 — Page 45

**STATE OF OKLAHOMA
COUNTY OF WASHITA**

NON-PRODUCING MINERALS

2618 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under

160.00 acres being NW/4 Section 14-11N-16W

**NON-PRODUCING LEASES
WOODS COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5317	8-28-63	Hazel Edna Pfleider, et vir	All interest in 160 acres being SE/4 Section 27-29N-14W	229	505
5324	10- 3-62	Neva Fern Wilhite, et vir	All interest in 127.80 acres being Lots 3 & 4, S/2 NW/4 Section 16-29N-14W	219	220
5355	8-29-63	Pearl Hood, et al	All interest in 160 acres being NE/4 Section 2-28N-14W	230	45
5356	8-29-63	Alvin W. Sternberger	All interest in 160 acres being NE/4 Section 10-28N-14W	230	12
5628	7-14-55	Nora L. Laycox, et al	All interest in 80 acres being N/2 SE/4 Section 11-24N-15W	151	193
5629	7-14-55	Julia P. Krobb, et vir	All interest in 80 acres being S/2 SE/4 Section 11-24N-15W	151	195
5630	7-13-55	John A. Hall, et ux	All interest in 160 acres being SW/4 Section 3-27N-15W	151	197
5632	7-13-55	Isaac Jaekel, et ux	All interest in 160 acres being SE/4 Section 24-27N-15W	151	190
5633	7-14-55	Mattie Jones	All interest in 160 acres being SW/4 Section 26-29N-15W	151	187
5635	7-14-55	Alta B. McCann, et al	All interest in 160 acres being S/2 SW/4 Section 24; W/2 NW/4 Section 25-24N-15W	151	256
5636	8-12-57	John H. Hull, et ux	All interest in 280 acres being N/2 SW/4 Section 85-24N-15W, I.M.; SW/4 & SW/4 NW/4 Section 11-23N-15W	152	49
5689	10-11-55	The Atkinson, Warren and Henley Company, a Corporation	$\frac{1}{2}$ interest in 160 acres being NW/4 Section 33-28N-15W	158	34
	7-22-55	Walter S. King, et ux	$\frac{1}{2}$ interest in 160 acres being NW/4 Section 33-28N-15W	158	32
5690	7-22-55	Walter S. King, et al	All interest in 160 acres being NE/4 Section 33-28N-15W	158	36
5727	3-16-56	Ida Wagner	All interest in 80 acres being S/2 SW/4 Section 9-26N-13W	161	467
6585	8- 1-63	George F. Keck, et al	All interest in 160 acres being SW/4 Section 1-28N-14W	230	430
6584	8- 1-63	George F. Keck, et al	All interest in 160 acres being SE/4 Section 31-29N-13W	230	428

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6592	9-13-63	Ralph H. Trenary	All interest in 165.91 acres being Lots 1 & 2, S/2 NE/4 Section 3-28N-14W. The above lease subject to Operating Agreement dated 2-26-64, between J. M. Huber Corporation, as Operator, and Wilcox Oil Company and Continental Oil Company as non-Operators in which Wilcox Oil Company owns 33.3883%.	231	15
6639	11-16-61	Frank A. Scripsick, et ux	½ interest in 156.24 acres being Lots 1 & 2, E/2 NW/4 Section 31-29N-13W	213	179
6640	11-16-61	Frank A. Scripsick, et al	½ interest in 165.01 acres being Lots 1 & 2, S/2 NE/4 Section 1-28N-14W	213	182
6641	11-16-61	Frank A. Scripsick, et ux	½ interest in 160 acres being NE/4 Section 7-28N-13W	213	200
6642	11-21-61	Wilbur H. Tanner, et ux	½ interest in 160 acres being SW/4 Section 32-29N-13W	213	197
6643	11-25-61	Clair Grace Roberson, et al	½ interest in 160 acres being NW/4 Section 32-29N-13W	213	188
6644	6-22-59	Lula B. Grant, et al	½ interest in 160 acres being NE/4 Section 36-29N-14W	213	185
6645	12- 2-61	Guy J. Ebersole, et ux	½ interest in 154.62 acres being Lots 3, 4 & 5, SE/4 NW/4 Section 6-28N-13W	213	194
6646	12- 5-61	Guy Ebersole, et al	½ interest in 158.74 acres being Lots 3 & 4, E/2 SW/4 Section 31-29N-13W	213	191
6660	2-28-64	T. W. Mantz, et al	All interest in 90 acres being North 90 acres of NW/4 Section 26-29N-14W	234	579

**STATE OF OKLAHOMA
COUNTY OF WOODS**

NON-PRODUCING MINERALS

- 1713 C. Hudspeth: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being S/2 SW/4 Section 23, E/2 NW/4 Section 26-27N-18W
- 1991 W. G. Parker: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 13-23N-14W
- 2140 Edward Snavelly et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 840.71 acres being Lots 1, 2, 4, S/2 NE/4, S/2 NW/4, NE/4 SW/4, S/2 SW/4, SE/4 Section 14, Lot 1, S/2 NE/4, S/2 SE/4 Section 15, NE/4 Section 23-29N-18W
- 2165 Edward Snavelly et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 2080.00 acres being S/2 NE/4, SE/4 Section 17, W/2 W/2 Section 21, E/2, S/2 NW/4, SW/4 Section 20, S/2 SE/4, NE/4 SE/4, S/2 SW/4, NW/4 SW/4 Section 29, S/2 NW/4, S/2 Section 32, N/2 Section 33, SW/4 Section 33-29N-18W
- 2166 Edward Snavelly et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 200.00 acres being SW/4 Section 17, NE/4 NW/4 Section 20-29N-18W
- 2130 E. E. Whatley: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 23-29N-19W
- 2131 E. E. Whatley: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 34-29N-19W

EXHIBIT C-2—Page 47

NON-PRODUCING LEASES WOODWARD COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5748	6-13-56	C. E. Cross, et ux	All interest in 160 acres being E/2 NW/4, W/2 NE/4 Section 21-22N-18W	117	229
5768	3-13-56	Lizzie J. Chastel	All interest in 80 acres being N/2 SW/4 Section 35-23N-17W, I.M.	117	411
5771	6-22-56	Frank A. Roedell, et ux	½ interest in 160 acres being NE/4 Sec- tion 21-23N-17W	117	573
5932	11- 1-61	Hazel M. Randolph, Ind. and as Executrix of the Estate of L. S. Randolph, Deceased	¼ interest in 80 acres being W/2 SW/4 Section 10-23N-22W	183	116
	10-23-61	P. M. Buckley	½ interest in above described lands.	183	114
	10-28-61	L. H. Witwer, et ux	½ interest in above described lands.	183	112
5933	10-23-61	James F. Nagle, et al	½ interest in 80 acres being E/2 SW/4 Section 21-24N-20W	183	120
	10-23-61	L. H. Witwer, et ux	½ interest in above described lands.	183	119
	11- 1-61	Hazel M. Randolph, Ind. and as Executrix of the Estate of L. S. Randolph, Deceased	¼ interest in above described lands.	183	122
5934	10-31-56	Robert G. Feese, et ux	192/1024 interest in 137.29 acres being Lots 3 & 4, SE/4 NW/4 Section 3-24N- 21W	127	280
5935	11- 1-56	T. H. Rutledge, et ux	½ interest in 200 acres being E/2 NE/4; NE/4 SE/4; Section 10; SW/4 NW/4; NW/4 SW/4; Section 11-24N-21W	123	470
	11- 1-56	The Federal Land Bank of Wichita, Kansas	½ interest in 40 acres being NE/4 NE/4 Section 10-24N-21W	123	600
5936	11- 2-56	Mable J. Binding, a widow	1/16 interest in 160 acres being SW/4 Section 12-24N-21W	123	588
	11- 1-56	Cora Jividen, a widow	½ interest in 160 acres being SW/4 Sec- tion 12-24N-21W, I.M.	123	592
	11- 1-56	L. S. Randolph	½ interest in 160 acres being SW/4 Sec- tion 12-24N-21W	123	596
6565	8- 8-63	United States of America	50% interest in 234.54 acres being Lots 1, 2, 3, 4 and SE/4 NE/4 and NE/4 SE/4 Section 5-24N-22W	—	—

**STATE OF OKLAHOMA
COUNTY OF WOODWARD**

NON-PRODUCING MINERALS

- 2126 Gottfried Feil: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 28-22N-22W
- 2136 George Stricker: An undivided $\frac{1}{2}$ minerals interest in and to all of the oil, gas and other minerals in and under 160 acres being W/2 NE/4 and W/2 SE/4 Section 34-22N-22W
- 2145 R. H. Cox: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being S/2 Section 22-23N-22W
- 2151 Wood Syrie: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being W/2 SW/4 and SW/4 NW/4 of Section 8; and NW/4 NW/4 Section 17-21N-19W
- 2152 George Stricker, Jr.: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being E/2 NW/4 and NE/4 SW/4 and NW/4 SE/4 of Section 18-22N-21W
- 2156 Ferninand Beuke: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 80 acres being E/2 SW/4 Section 26-21N-22W
- 2163 Henry A. Dorner: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NE/4 Section 33-21N-20W
- 2168 Harry E. Rogers: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 31-22N-21W
- 2183 Vernie L. Smith: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 12-21N-20W
- 2184 L. B. Krouth: An undivided $\frac{1}{4}$ interest in all of the oil, gas and other minerals in and under 80 acres being N/2 NW/4 Section 27-22N-20W
- 2195 John Raymond Nelson: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being W/2 NW/4 Section 5 and E/2 NE/4 Section 6-21N-19W
- 2045 Edward L. Leighton: An undivided one-half ($\frac{1}{2}$) interest in and to all of the oil, gas and other minerals in and under and that may be produced from 2,840 acres, more or less, being all of SW/4 & W/2 SE/4 & SE/4 SE/4 Section 22; and N/2 NE/4 & NW/4 & N/2 SW/4 & SW/4 SW/4 Section 27; and E/2 Section 28; and all Section 33; and W/2 NW/4 and SW/4 SW/4 Section 34, all in 26N-18W; and W/2 NW/4 and SW/4 Section 4; and all Section 5; and NW/4 and W/2 NE/4 Section 8, all in 25N-18W
- 2093 W. H. Lothman: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NE/4 Section 14-20N-21W
- 2096 W. H. Lothman: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being W/2 SW/4 Section 2; and E/2 SE/4 Section 3; and SE/4 NW/4 and N/2 SW/4 and SW/4 SW/4 Section 11, all in 20N-20W
- 2099 Floyd O. Howarth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being S/2 NE/4 and N/2 SE/4 Section 20-22N-17W
- 2100 Floyd O. Howarth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being E/2 SW/4 and NW/4 SW/4 and SE/4 NW/4 Section 21-22N-17W
- 2116 W. H. Lothman: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being E/2 Section 13-21N-21W
- 2119 M. L. Bleckley: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 32-22N-21W
- 2120 George Stricker, Jr.: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 159 acres, being NW/4, except 1 acre out of center of the North side of said quarter, of Section 27-22N-22W
- 2121 Floyd O. Howarth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NE/4 Section 16-25N-19W

- 2201 J. M. Erwin: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under and that may be produced from 1,094.63 acres, more or less, being Lots 6 & 7 of Section 81-21N-17W; and Lots 1 and 2 and SW/4 NE/4 and Lot 3 and S/2 SE/4 and NW/4 SE/4 and W/2 Section 36-21N-18W; and Lots 1 and 2 of Section 25-21N-18W; and Lots 3 and 4 and S/2 NW/4 of Section 1-20N-18W; and SE/4 Section 1-20N-18W; and Lot 2 and SE/4 SE/4 of Section 26-21N-18W
- 2223 Samuel B. Wood: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being NW/4 and N/2 SW/4 and SW/4 NE/4 and NW/4 SE/4 Section 24-21N-21W
- 2230 George C. Phillips: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160-acres being N/2 SE/4 and E/2 SW/4 Section 28-21N-19W
- 2237 Nettie Croskey: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 80 acres being W/2 NW/4 Section 23-21N-17W
- 2243 George F. Marston: An undivided $\frac{1}{4}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SW/4 Section 33-21N-22W
- 2461 Wiley Walters: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 800 acres being NE/4, S/2 Section 30; and N/2 Section 31-25N-18W
- 2464 L. B. Krouth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 115 acres being W/2 NW/4 Section 17 and that part of W/2 SW/4 of Section 8 lying and being South of The A.T. & S.F. R.R. Co. ROW 22N-22W
- 2470 L. B. Krouth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 1-20N-22W
- 2480 L. B. Krouth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NW/4 Section 15-21N-22W
- 3094 Irish Syndicate Live Stock & Loan Company: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 240 acres being Lots 1, 2, 3 and 4 and SE/4 NE/4 and NE/4 SE/4 Section 5-24N-22W

STATE OF TEXAS COUNTY OF CALLAHAN

NON-PRODUCING MINERALS

- T-71 John F. Dickson: An undivided 19/250 interest in and to all the oil, gas and other minerals in and under Tract 1: 320.00 acres being E/2 of Section 149, B.B.B. & C. Ry. Co. Survey, patented to S. M. Swenson by Patent 29, Vol. 14.
- Tract 2: 125.00 acres being out of Survey No. 1, I & GN Ry. Co. Survey, patented to W. J. Glenn by Patent No. 256 in Vol. 54.
- Said tracts being the same land described in the certain Mineral Deed dated October 1, 1930, by and between John L. Dickson, Grantor, and H. F. Wilcox Oil and Gas Company of Texas, Grantee, recorded December 1, 1930, in Book 135, at page 636, of the records of Callahan County, Texas.

NON-PRODUCING LEASES CARSON COUNTY, TEXAS

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6586	2-11-60	G. H. Deahl, et al	All interest in 310.33 acres being W/2 Sec. 23, in Blk. T of AB&M Survey, less 9.67 acres	1	361
5697	9- 9-57	Nolan Judy, et ux	All interest in 320 acres being SW/4 Sec. 22; NE/4 Sec. 23, in Blk. T of AB&M Railway Company Survey	106	549

EXHIBIT C-2—Page 50

NON-PRODUCING LEASES CLAY COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
3879	9-28-43	George W. Scaling, et al	¼ interest in 80 acres being west 80 acres of SW/4 Sec. 15, HT&B Survey A-217, subject to P.P. of \$8,000.00 from ¼ of ¼ ORI reducible to 3/32 of 7/8 ORI after payout.	140	553

STATE OF TEXAS COUNTY OF COKE

NON-PRODUCING MINERALS

T-72 John L. Dickson: An undivided 1/32 interest in and to all the oil, gas and other minerals in and under 160.00 acres being the Northeast ¼ of Section 8, Block W, Certificate 2/1549 T & P Ry. Co. Land. Subject to oil and gas lease dated February 8, 1962, executed by J. R. Sims, as Agent and Attorney in fact for L. S. Abbott et al Lessor, to Norris B. Creath, Lessee, recorded in Vol 141, page 251 Deed records of Coke County, Texas.

NON-PRODUCING LEASES COLEMAN COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5892	4-26-44	J. F. Gaines, et ux	¾ interest in 82.80 acres being Blk. 13 of the John H. Barclay Survey No. 700, less South 20 acres thereof, subject to an un-reduced 3/64 of 7/8 ORI. All interest in 49.85 acres being the west 49.85 acres of Blk. 14 of the John H. Barclay Survey No. 700, subject to 1/16 ORI	249	320

STATE OF TEXAS COUNTY OF ERATH

NON-PRODUCING MINERALS

T-67 J. C. Cooke Oil Company: an undivided ¼ interest of ¼ of all the oil, gas, casinghead gas and all other production that may be obtained from The West 50 acres of the South 284 acres of the J. E. Smith 497 acre subdivision of the Thomas Stubblefield Survey

NON-PRODUCING LEASES HENDERSON COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6329	9-18-61	Billie Gene Wright, et ux	All interest in 122.25 acres being out of the Dickerson Parker Survey; also, all interest in 34.00 acres being out of the J. N. Acosta 160 acre Survey, both of which tracts are more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	59
6330	9-18-61	Alva L. Jolliff, et al	All interest in 40 acres being NE/4 NE/4 of the 640 acre George E. Harrison, A-364 Survey as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	43

EXHIBIT C-2—Page 51

6331	9-18-61	G. U. (Jack) Browning, et ux	All interest in 40 acres being out of the Isaac Williams Survey, Abstract No. 802, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	53
6332	9-18-61	Evelene Sue Bass, et al	All interest in 100 acres being out of the James K. Brown Survey, No. A-64, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	51
6333	9-18-61	G. U. (Jack) Browning, et al	$\frac{1}{2}$ interest in 50 acres being out of the Isaac Williams Survey, Abstract No. 802, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	47
	9-18-61	A. E. McCain, et ux	$\frac{1}{4}$ interest in 50 acres being out of the Isaac Williams Survey, Abstract No. 802, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	49
6335	9-18-61	H. C. Barton	All interest in 5.00 acres being out of the James K. Brown Survey, A-64, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	45
6334	9-18-61	G. U. (Jack) Browning, et al	$\frac{1}{2}$ interest in 52.50 acres being out of the Susan Head Survey, Abstract No. A-293, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	506	288
6363	9-18-61	Cuba English, et al	746/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	481
	9-18-61	K. E. Browning, et al	126/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	484

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
9-18-61		Earnest English	160/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	498
9-18-61		H. W. (Hamp) English	160/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	491

**STATE OF TEXAS
COUNTY OF LIMESTONE**

NON-PRODUCING MINERALS

T-79 John L. Dickson: An undivided .14548 interest in and to the oil, gas and other minerals in and under 14.00 acres known as the King Dancer Tract out of the Pedro Varella XI League Grant, more particularly described as follows: Beginning at the Southeast corner of the Mariah Slaughter Tract, a stake in the East line of said King Dancer's 56 acre Tract, 396 varas South 35 East from the Northeast corner of said 56 acre tract; thence South 55 West with Mariah Slaughter's South line 376.5 varas; thence South 45 East with the West line 223.5 varas; thence North 55 East 344.8 varas; thence North 35 West 221.7 varas to the place of beginning, and containing 14 acres of land, more or less.

The Above is subject to a reservation as set forth in a certain mineral deed dated January 28, 1930, executed by L. L. Steele to John L. Dickson and covering the above described land, said deed being filed for record on February 4, 1930, and is recorded in Vol. 211 at page 500 of the Deed Records of said County and State. Said reservation provides to-wit: It is understood between the grantee and grantor herein that should there at any time be oil or gas, or either of them, produced from a greater depth 3150 feet, the grantee herein shall receive only .007956 of the oil, or one-half of the interest transferred in this deed to the present production from a greater depth than 3,150 feet. Or in other words, the grantor herein reserves one-half of all the oil, gas, or other minerals that may be produced from a greater depth than 3,150 feet from this interest.

T-80 John L. Dickson: An undivided 38/46080ths interest in and to the oil, gas and other minerals in and under A part of the Pedro Varella XI League Grant, in Limestone County, Texas: Beginning on the West line of the J. R. Henry Tract where the same is crossed by Rocky Creek; thence down said creek to the East line of the Ross Tract; thence Southward with the East line of the said Ross Tract to its SE corner; thence North 45 East to the West line of the Henry Tract; thence North 45 West to the place of beginning, containing 60 acres, more or less, and known as the Alexander place, and being the same land conveyed to M. Alderman by deed dated November 5, 1910, by Ynez R. Mexia, I. May Mexia, May D. Mexia and C. E. Mexia; also being the land that was bought by Herbert Bluit from Joseph and Julius Nussbaum by deed dated _____ day of _____, 19____, recorded in volume 60, page 363, Deed Records of Limestone County, Texas, to which deed reference IS HEREBY made for all lawful purposes.

The above is subject to the following reservation, to-wit: It is hereby understood between the grantee and the grantor herein that the grantee herein shall receive no part of the oil, that may hereinafter be produced from a depth greater than 3,150 feet.

EXHIBIT C-2—Page 53

NON-PRODUCING LEASES MADISON COUNTY, TEXAS

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6341	11-21-61	Dan B. Cole, et ux	½ interest in 291.97 acres out of the Daniel Parker and James Burns Surveys more fully described in lease, reference hereby being made to said lease, and said description in said lease being hereby incorporated by reference.	136	704
6342	11-28-61	Joe R. Hinds, et ux	½ interest in 345.27 acres comprising ten tracts out of the Daniel Parker Survey and the J. Woodruff Survey being more fully described in lease, reference hereby being made to said lease, and said description in said lease being hereby incorporated by reference	136	706

STATE OF TEXAS COUNTY OF MONTAGUE

NON-PRODUCING MINERALS

- 3229 Frank H. Dunn: An undivided 10/110ths interest in and to the oil, gas and other minerals in and under 110 acres being a part of Section No. 5, E.T. R.R. Co. Survey, Abst 230 Described as follows: Beginning 356 ¼ vrs. S. 45E. from the West corner of the East Quarter (E/2) of said Section No. 5; thence S. 45E. 593 ¾ vrs. to the South Corner of said East Quarter of said Section No. 5; thence N.45E. 950 vrs. to the East corner of said section No. 5; thence N. 45W. 712 ½ vrs. to a corner in the N.E. Boundary line of said Section; thence S.45 W. 475 vrs. to corner; thence S.45E. 118 ¾ vrs. to corner; thence S.45W. 475 vrs. to the place of beginning.
- 3243 Frank H. Dunn: An undivided 10/148ths interest in and to the oil, gas and other minerals in and under 148 acres being a part of the Mary Freeland Survey, Abstract No. 1481 described as follows: Beginning at the North corner of said Mary Freeland Survey, the same being also the North corner of Section No. 6 as surveyed for E.T. R.R. Co. by virtue of Cert. No. 285, situated about 5 miles S. 55°E. from the Town of Montague, Texas; thence S.47°W. With the N.W. line of said Mary Freeland Survey 950 vrs to its West corner; thence So. 43°E. 950 vrs. to its south corner; thence N. 47°E. 542 vrs. to a creek; thence in a northerly direction with said creek 1366 feet to the N.E. line of said Mary Freeland Survey at a point 856 feet N. 43°W. from the East corner of said Mary Freeland Survey; thence N. 43°W. 642 vrs to the place of beginning.

NON-PRODUCING LEASES STEPHENS COUNTY, TEXAS

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
3480	12-16-40	Annie C. Whallen, et al	All interest in 80 acres being S/2 E/2 of the TE&L Survey No. 1089, Abstract No. 370.	187	590

EXHIBIT C-3**OTHER INTERESTS IN LAND UNDER THAT CERTAIN PLAN OF
REORGANIZATION DATED MAY 13, 1964, BY AND BETWEEN
WILCOX OIL COMPANY, TENNESSEE GAS TRANSMISSION
COMPANY AND W X C COMPANY.****KINGMAN COUNTY, KANSAS
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6285	3-20-61	Barney B. DeWeese and Lela N. DeWeese	NE/4 NW/4 Section 17-29S-7W	Not	given

**BECKHAM COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor-Grantor</i>	<i>Brief Description</i>	<i>Recorded Book</i>	<i>Page</i>
1983	8-23-50	Cleo Walter et al	N/2 Section 24-10N-21W	84	306
1983	11-19-49	Cleo Walter	N/2 NE/4 Section 23, S 1/2 SE/4 Section 14-10N-21W	80	455

**CREEK COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor-Grantor</i>	<i>Brief Description</i>	<i>Recorded Book</i>	<i>Page</i>
1983	6-11-36	Harriet P. Gilstrap	N/2 NW/4 SW/4 Section 25-16N-9E	903	262
1983	8- 8-41	Lizzie Morrison Jones	S/2 NW/4 SE/4 Section 6-16N-9E	481	256
1983	8- 8-41	Ada Hill Anderson	SW/4 NE/4, E/2 SE/4 NW/4, N/2 NW/4 SE/4 Section 6-16N-9E	482	61
1983	8- 8-41	Oscar Harany	W/2 NW/4 NW/4 Section 6-16N-9E	481	257
1983	11-18-35	Pearlie Irene Roberts	W/2 W/2 Section 8-16N-9E	435	380
1983	4- 4-29	Addie Cunningham	NW/4 SE/4 Section 13-16N-9E	—	—
1983	4- 4-29	H. H. Harrison	SE/4 SW/4, S/2 NE/4 SW/4 Section 13-16N-9E	—	—
1983	6-12-27	H. H. Harrison	SW/4 SE/4, SE/4 SW/4 Section 13- 16N-9E	351	558
1983	8-24-36	C. W. Porter	SW/4 SW/4 Section 15-16N-9E	437	547
1983	4-10-36	M. J. McSand	SE/4 SW/4, S/2 NE/4 SW/4 Section 15- 16N-9E	436	350
1983	4-17-36	Ed Abraham et al	SE/4 SW/4, S/2 NE/4 SW/4 Section 15-16N-9E	436	394
1983	9-14-37	W. G. Pardoe et al	NW/4 NW/4 Section 17-16N-9E	446	79
1983	8-14-36	Decter Slyman	NE/4 Section 18-16N-9E	437	503
1983	3- 9-36	J. E. Nipp et al	E/2 E/2 SE/4 Section 21-16N-9E	434	481
1983	4-17-25	S. P. Stubblefield	E/2 NE/4 Section 21-16N-9E, S/2 NW/4 NW/4 Section 22-16N-9E	311	293
1983	4-11-29	Charles P. Fronchat	W/2 SW/4 Section 24-16N-9E	—	—
1983	5-21-29	David Lee Allen, by his Guardian	NW/4 Section 24-16N-9E	377	565

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
1983	2-17-42	John Bishop	NW/4 Section 24-16N-9E	491	107
1983	4- 4-29	L. W. Atteberry	W/2 NW/4 Section 25-16N-9E	—	—
1983	4- 6-29	Mae Cupp	N/2 NW/4 SW/4 Section 25-16N-9E	—	—
1983	4- 4-29	Ed Abraham	S/2 NW/4 SW/4 Section 25-16N-9E	—	—
1983	9-29-25	Jessee Houston, by his Guardian	SW/4 SE/4 Section 26-16N-9E	322	337
1983	10-14-25	Charlie Seber, by his Guardian	SE/4 SE/4 Section 26-16N-9E	322	338
1983	10-14-25	Frank Mike	SE/4 SE/4 Section 26-16N-9E	321	559
1983	9- 4-25	W. W. Groom et al	NE/4 SW/4 Section 26-16N-9E	—	—
1983	9-22-25	A. A. Rollestone	NW/4 Section 26-16N-9E	322	341
1983	11- 2-25	Ed Abraham	NE/4 NE/4 Section 27-16N-9E	321	557
1983	11-23-36	A. H. Davidson	NW/4 NW/4 Section 27-16N-9E	441	547
1983	7-29-36	Carol L. Dunlap	SW/4 SW/4, W/2 SE/4 SW/4 Section 27-16N-9E	437	427
1983	3-17-36	Ed Abraham	West 50 acres of S/2 SE/4 Section 27-16N-9E, SE/4 SE/4 Section 26-16N-9E	—	—
1983	10-10-28	Reese Fox	W/2 SE/4 NE/4 Section 29-16N-9E	373	401
1983	1- 6-33	Elizabeth M. Frierson	W/2 SE/4 Section 29-16N-9E	418	191
1983	9- 4-25	May B. Lovett, Admx.	W/2 SE/4 Section 36-16N-9E	321	558
1983	9- 8-25	Joe Allen	SE/4 SE/4 Section 36-16N-9E	321	557
1983	9-10-25	Marvin L. Jones	SE/4 NW/4 Section 36-16N-9E	322	342
1983	9- 9-25	James Jackson	NW/4 NW/4 NW/4 Section 36-16N-9E	322	341
1983	9- 8-25	Daniel Seay	NE/4 NW/4 NW/4, S/2 NW/4 NW/4 Section 36-16N-9E	322	343
6506	4- 4-63	Roy Dorrell and Nora Dorrell	5.12 acres, more or less, out of NW/4 NW/4 SW/4 of Section 18-16N-10E, as more particularly described in said lease	931	318-19
5834	11-22-61	J. B. Castle, individually and as Agent for Minority Owners	SW/4 Section 35-15N-7E containing 160 acres, more or less	901	307
2800	12- 7-36	Albert Kelly, et ux	N/2 SE/4 Section 35-16N-8E (Surface lease for storage)	442	102
2926	4-26-51	W. R. Yeldell et al	Strip of land 40' wide, near E line of NW/4 of Sec. 11-14N-6E to be used as Right of Way into A. W. Lycan lease	178	293

KINGFISHER COUNTY, OKLAHOMA

5946 Dover Hennessey Gas Products Plant
 An 0.682 participation in the Dover-Hennessey Gas Products Plant, Kingfisher County, Oklahoma, as per that certain agreement for construction and operation of Dover Hennessey Gas Products Plant, dated _____ day of _____, 1961, by and between Wilcox Oil Company, et al, and that certain Revision of Exhibit "B" to said contract, dated June 1, 1962.
 Net Participation in plant is 0.682.

EXHIBIT C-3—Page 2

LINCOLN COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Page
5559	10-21-63	State of Okla.	W/2 SE/4 Section 16-14N-6E (Agricultural lease)	61	4056 (land office)
5585	12-21-61	State of Okla.	SW/4 Section 16-14N-6E (Agricultural lease)	61	816 (land office)
5591	1- 1-55	Joe Delozier et al	S/2 SW/4 Section 10, N/2 NW/4 Section 15, all in 14N-6E (Surface lease for location of producing facilities)	298	169
6483	12-10-62	W. E. Blaney et ux	NW/4, N/2 NE/4 Section 21-14N-6E (Surface Lease for location of producing facilities)	454	172
6276	1-19-61	M. Royer	SW/4 SE/4 Section 7-14N-6E (Road right of way)	417	589
1096	1- 1-64	Sac & Fox Tribal Council	12.17 acres in SW/4 Section 15-14N-6E (Business lease)	—	—
	12- 8-62	Sac & Fox Tribal Council	625.23 acres being S/2 NW/4 and SW/4, Section 15 (less 12.17 acres above) E/2 SE/4 Section 16, (less 2.60 acres) and NW/4, N/2 SW/4, & N/2 NE/4 Section 22, all in 14N-6E (Agricultural Lease)	—	—

NOBLE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Page
1983	4- 6-61	Gladys L. Bechthold	Approx. 1½ acre in NW/4 NW/4 Section 24-20N-1W	—	—
1983	11- 4-61	Paul Tetyak, by Fay Pricer, Guardian	S/2 SW/4 Section 14-20N-1W	—	—
1983	5-26-60	Leonora M. Seids et al	Approx. ½ acre in NW/4 NE/4 NW/4 Section 20-20N-1E	104	583
1983	8-18-59	Gladys L. Bechthold	S/2 Section 13-20N-1W	99	233
1983	1- 5-59	Gladys L. Bechthold	NW/4 Section 24-20N-1W	95	401
1983	4- 4-59	Gladys L. Bechthold	Approx. ½ acre in NW/4 NW/4 Section 24-20N-1W	96	612
1983	1- 5-59	Herman G. Habben et al	NE/4 Section 24-20N-1W	95	400
1983	4-29-59	H. G. Habben et al	Approx. ¾ acre in NW/4 NE/4 Section 24-20N-1W	97	277
1983	1- 9-59	John Bennett Shaw	SW/4 Section 18-20N-1W	96	116
1983	2-27-59	Max Groom, et al	A strip of land not to exceed two (2) rods in width across South 300 feet of S/2 SE/4 Section 18-20N-1W	96	117
1983	1- 6-59	Dwight Day, et al	SW/4 Section 17-20N-1W	96	399
1983	1- 6-59	Helen Schott et al	SE/4 Section 17-20N-1W	96	398
1983	1- 9-59	Ethel H. Spradlin et al	SW/4 Section 16-20N-1W	96	397
1983	1- 6-59	J. J. Bezdicek	S/2 SW/4 Section 15, SE/4 Section 16-20N-1W	95	396
1983	1- 6-59	M. D. Springfield	SE/4 Section 15-20N-1W	95	395
1983	1-19-59	Kate Brackin, et al	S/2 SW/4 Section 14-20N-1W	95	429

EXHIBIT C-3 — Page 3

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
1983	1- 5-59	Herbert Dahl et al	SE/4 Section 14-20N-1W	95	394
1983	1- 5-59	Leonora M. Seids et al	NW/4 Section 20-20N-1E	95	393
1983	1- 5-59	Helen M. Wilson et al	NE/4 Section 20-20N-1E	95	392
1983	1- 5-59	Nora Nellie Elgin et al	E/2 NW/4 Section 19-20N-1E	95	390
1983	1- 5-59	Nora Nellie Elgin et al	W/2 NW/4 Section 19-20N-1E	95	389
1983	1- 5-59	Nora Nellie Elgin et al	W/2 NW/4 Section 19-20N-1E	95	388
1983	4-27-59	Nora Nellie Elgin et al	Approx. 1 acre in NW/4 NW/4 Section 19-20N-1E	97	274
1983	3-30-60	Nora Nellie Elgin et al	Approx. 1 acre in NW/4 NW/4 Section 19-20N-1E	103	336
1983	9- 5-59	Carl O. Gottschalk et al	185 rods in Section 17-20N-1E	99	653
1983	1- 5-59	Ralph E. Sherrard	NE/4 Section 19-20N-1E	95	387
1983	1-28-59	Carl Gottschalk et al	One (1) acre in SW/4 SE/4 SW/4 Section 17-20N-1E	95	402
1983	1- 9-59	State of Oklahoma	Licenses to cross S. H. 86 approx. 6 miles South of Perry, Okla; ie, 63 feet North of SW/corner of Section 14-20N-1W (Permit No. 32-41)	—	—
1983	1- 9-59	State of Oklahoma	License to cross U. S. 77 approx. 6 miles South of jct. U. S. 77 and U. S. 64, 5 miles West of Perry, Okla; ie, 63 feet South of NW/corner of Section 24-20N-2W (Permit 32-42)	—	—
1983	3-10-59	Arthur L. Bower	W/2 SE/4 Section 17-20N-1E	97	696
1983	6-18-58	Carl O. Gottschalk	176 rods across SW/4 and 84 rods across NE/4 Section 17-20N-1E	90	575
1983	3-30-62	Lawrence E. Schwardt et al	Approx. 1 acre in SW/4 SW/4 Section 13-20N-2W	117	673
1983	1- 6-59	Thomas Lee Jerome	SE/4 Section 13-20N-2W	96	115
1983	1-15-59	Fay M. Roberts	SW/4 Section 13-20N-2W	96	118

**OKLAHOMA COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Page
2658	2-11-31	H. C. Tanner	A Part of NE/4 Section 10-11N-3W	105	529
2658	6-15-31	Terminal Oil Mill Company	A part of NW/4 Section 3-11N-3W	—	—
2658	6-30-31	Terminal Land Company	A part of NW/4 SW/4 Section 3-11N-3W	—	—
2658	5- 1-31	Oklahoma Railway Co.	A strip of land in W/2 Section 3-11N-3W	—	—
2658	7-21-32	Terminal Land Company	Approx. 57½ rods across South end of Gov't Lot #6 of NW/4 Section 3-11N-3W	222	177
2658	6-18-32	J. R. Polin	Across N. end of Lots 17, 18, 19 and 20, Block 2, Comptons Park Addition of City of Oklahoma City, Oklahoma	—	—
2658	4- 7-33	F. G. Martin	SE/4 SE/4 Section 36-12N-3W	—	—
2658	6-23-32	H. G. Marshall	Part of Section 36-12N-3W, part of Section 31-12N-2W	—	—
2658	7-15-31	Rosa Hammer et vir	N. 53½ acres of SW/4 (Being Blk 1 of Corffs Sub-division)	180	544

EXHIBIT C-3 — Page 4

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
2658	3-20-31	J. C. White	Lot 1 Blk 5 of Chapin-Levy Addition of Oklahoma City, Oklahoma	178	196
2658	9-16-31	Missouri-Kansas-Texas Railroad Company	A plot of ground 75 feet wide by 100 feet in length in NW/4 Section 3-11N-3W	—	—
2658	5-20-31	The Chicago, Rock Island and Pacific Railway Company	Described by Metes and Bounds in Agreement	—	—
2658	5-31-31	The Chicago, Rock Island and Pacific Railway Co.	Described by Metes and Bounds in Agreement	—	—
2658	5- 4-31	The Chicago, Rock Island and Pacific Railway Company	Part of Easterly R.O.W. Line of RR Company about 76 feet N. from Easterly Direction of N. Line of Pottowatomie Avenue, McCormicks Factory Addition to Oklahoma City, Oklahoma	—	—
2658	5- 4-31	St. Louis San Francisco	A Tract of land in McCormicks amended Factory Addition of City of Oklahoma City, Oklahoma	—	—
2658	3-22-33	The City of Oklahoma City, Oklahoma	Described by Metes and Bounds in Agreement	—	—
2658	4-17-34	The City of Oklahoma City, Oklahoma	Part of Chapin & Levy Addition to Oklahoma City	—	—
2658	4- 8-34	The City of Oklahoma City, Oklahoma	A tract of land along Reno Avenue in Section 34-12N-3W	—	—

**OKMULGEE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor-Grantor</i>	<i>Brief Description</i>	<i>Recorded Book</i>	<i>Page</i>
1983	8-11-59	Bennie Denham et ux	60 rods across E/2 NE/4 NW/4 Section 35-15-11E	—	—
1983	8-11-59	William M. Harvey et al	160 rods across N. Line of NE/4 Section 34-15N-11E	—	—
1983	8- 3-36	Wm. Thompson et al	SE/4 NE/4 Section 7-15N-11E	487	329
1983	8-28-23	Wm. Thompson et al	SW/4 Section 7-15N-11E	333	289
1983	12-18-37	Wm. Thompson	Pipeline R.O.W. beginning 1570 feet E. of SW/corner of Section 19-15N-11E and extending Northerly to a point 285 ft. S. of N. Line of Section 18-15N-11E and 1855 feet east of W. line of Section 18-15N-11E a total distance of 2 miles	499	512
1983	4-11-29	Wm. Thompson	N/2 Section 30-15N-11E	—	—

**OSAGE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor-Grantor</i>	<i>Brief Description</i>	<i>Recorded Book</i>	<i>Page</i>
3885	5- 8-50	John Oberly, Principal Chief for Osage Tribe #4	SW/4 Section 15-22N-8E	—	—
1983	8-31-55	George W. Snedden	N/2 Section 32-28N-8E	73	462
5642	5-27-59	Paul Pitts, principal Chief for Osage Tribe #74	SW/4 NW/4 Section 33-28N-8E	—	—

EXHIBIT C-3 — Page 5

**PAYNE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
1983	7- 2-52	Sam Lee et al	SW/4 Section 3, NW/4 Section 10-18N-2E	109	138

**WASHITA COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
1983	3-23-50	Cleo Walter	S/2 NW/4 Section 19-10N-20W	—	—

**GRAY COUNTY, TEXAS
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
T-85	12-10-26	Panhandle & Santa Fe Railway Company	Contract for Industry Track, 2567 feet in length in Pampa, Gray Co., Texas	—	—
T-11	7-14-26	Phebe A. Worley & Albert Combs	W/2 Section 59, I&GN RR Co. (Blk 3) Survey	30	148
	7-14-26	Phebe A. Worley	SE/4, Section 64; and E/2 Section 63, I&GN RR Co., (Blk 3) Survey	30	144
	7-14-26	Phebe A. Worley, E. E. Reynolds, Amanda Reynolds	E/2 and the SW/4 of Section 62, I&GN RR Co., (Blk 3) Survey	30	145
	7-15-26	C. N. Baggerman	NW/4, Section 64, I&GN RR Co. (Blk 3) Survey	30	241
	7-15-26	J. M. Saunders	S/2 of Section 65 and NE/4 of Section 64 I&GN RR Co. (Blk 3) Survey	30	242
	7-15-26	Wm. Flaherty	NW/4, Section 65, I&GN RR Co. (Blk 3) Survey	30	243
	7-15-26	Alex Smith	NE/4 Section 80, and SE/4 Section 79, I&GN RR Co., (Blk 3) Survey	30	244
	7-15-26	T. H. Lane	NE/4 Section 79, I&GN RR Co. (Blk 3) Survey	30	245
	7-15-26	Chas. C. Cook	NW/4 Section 79, I&GN RR Co. (Blk 3) Survey	30	246
	7-15-26	J. R. Henry	W/2, Section 78 and NE/4 Section 91, I&GN RR Co., (Blk 3) Survey	30	246
	1-15-36	Fred Palmer and Callie Halwes Klein	SE/4 Section 87, I&GN RR Co. (Blk 3) Survey	67	307

**LIPSCOMB COUNTY, TEXAS
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
1983	5-27-59	C. R. Brown, et ux	Approx. 1 acre in NW/corner of Section 60, Blk 10, H.T. & B. R. R. Survey	78	459
1983	5-27-59	C. R. Brown et al	A strip of land for pipeline along the North line of Section 60, Blk 10, H.T. & B. B. R. R. Survey	78	458

EXHIBIT C-3 — Page 6

**FEE PROPERTIES
CLEVELAND COUNTY, OKLAHOMA**

SW/4 Section 17-9N-1W containing 160 acres situated in Cleveland County, Oklahoma and being the same land described in,

Deed	Grantor	Grantee	Dated	Recorded	Interest
a	Odel Henson, et ux	H. F. Wilcox Oil and Gas Company	12-19-28	Vol 77, page 343	½ minerals
b	County Treasurer (Tax Sale)	A. L. Chapman	4-17-39	Vol 126, page 104	Surface

subject to:

1. Pipeline Right-of-Way in favor of Champlin Refining Company.

**FEE PROPERTIES
CREEK COUNTY, OKLAHOMA**

SW/4 Section 35-16N-8W containing 164 acres situated in Creek County, Oklahoma, and being the same land described in Quit Claim Deed dated October 2, 1951, from The Board of County Commissioners of Creek County, Oklahoma, Grantors, to A. L. Chapman, Grantee, recorded in Volume 633, Page 322, of the records of Creek County, Oklahoma, insofar as said instrument covers the surface estate only, subject to the following reservations:

1. 2 acres out of SW/4 used for County cemetery.
2. Reservation of all minerals by County.
3. 24 acres out of SW/4 SW/4
4. 1 acre out of SW/4 conveyed to Deep Rock Oil Company.

**FEE PROPERTIES
OKLAHOMA COUNTY, OKLAHOMA**

S/2 of Block 9, Chapin and Levy Addition to Oklahoma City, covering area of 75' x 150' situated in Oklahoma County, Oklahoma, and being the same lands described in Warranty Deed executed December 18, 1934, from F. G. Martin and wife, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 365, Page 404, of the records of Oklahoma County, Oklahoma, insofar as said instrument covers the surface estate only.

Lots 11, 12, 13 and 14, all in Block 7 of Schillings Addition to Oklahoma City, situated in Oklahoma County, Oklahoma, and being the same lands described in Warranty Deed executed July 19, 1933, from Robert M. Messenger, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 434, Page 476, of the records of Oklahoma County, Oklahoma, insofar as said instrument covers the surface and minerals.

**FEE PROPERTIES
OKMULGEE COUNTY, OKLAHOMA**

NE/4 SE/4 Section 36-14N-11E, situated in Okmulgee County, Oklahoma and being same lands described in Warranty Deed executed March 18, 1918, from H. H. Hay, Grantor, to Giles Penick, Grantee, recorded in Volume 140, Page 334, of the records of Okmulgee County, Oklahoma, insofar as said instrument covers an undivided 1/36 interest subject to:

1. Oil and Gas lease dated January 26, 1917, executed in favor of E. W. Kimbley and under which Wilcox Oil Company receives 1/36 of 1/8 interest in all oil and gas produced.

**FEE PROPERTIES
POTTAWATOMIE COUNTY, OKLAHOMA**

All N/2 SW/4, Section 23-6N-3E, containing 80 acres, situated in Pottawatomie County, Oklahoma and being the same lands described in Warranty Deed executed October 15, 1932, from J. K. Warren, Grantor, to Wilcox Oil and Gas Company, Grantee, recorded in Volume 136, page 366, of the records of Pottawatomie County, Oklahoma, insofar as said instrument covers the surface estate only.

**LEASES
TULSA COUNTY, OKLAHOMA**

Lease dated October 1, 1936, from F. S. Kerrigan, and J. F. Kerrigan, Lessors, to H. F. Wilcox Oil and Gas Company, Lessee, wherein Wilcox leased for a period of 20 years ending September 30, 1966, the following described premises situated in Tulsa, Tulsa County, Oklahoma:

Lot 1, in Block 2 (except Northernmost 40') and Lot 2, in Block 2, all a part of the Kirkwood Addition to the City of Tulsa.

Wilcox constructed an office building and filling station on these leased premises and is now bound on the following subleases:

1. Lease from Wilcox Oil Company to Harry Payne of all that portion of Lots 1 and 2 of Kirkwood Addition presently being occupied by Wilcox and identified as Wilcox Station #107; such lease expiring 8 8/12 years from January 1, 1963.
2. Lease from Wilcox Oil Company to Southern Industrial Finance Corporation of all the portion of Lots 1 and 2, Kirkwood Addition, on which is situated a white stucco, one story, office building together with the parking area to the North and West thereto; such lease expiring September 30, 1966.

All right, title and other interests which Wilcox Oil Company has in the above mentioned buildings are included herein.

**FEE PROPERTIES
TULSA COUNTY, OKLAHOMA**

Northerly 50' of Lot 2, Block 159, situated in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, being the same land described in Warranty Deed dated June 25, 1928, from R. W. Thomas and Lula D. Thomas, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 732, page 396, of the records of Tulsa County, Oklahoma.

All of Lot 1, in Block 159, situated in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, being the same land described in Warranty Deed dated February 24, 1920, from Emily C. Potter, J. J. Culbertson, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Book 333 at Page 390, of the City of Tulsa records, Tulsa County, Oklahoma.

The North 25' of Lot 5 and the South 25' of Lot 6, in Block 166, situated in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, and being the same land described in Warranty Deed dated October 10, 1928, from H. F. Wilcox Loan and Investment Corporation, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 817, page 29, of the City of Tulsa records of Tulsa County, Oklahoma.

North 75 feet of Lot 6, Block 166, in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, and being the same land described in Warranty Deed dated October 10, 1928, from H. F. Wilcox Loan and Investment Corporation, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 817, page 25, of the City of Tulsa, records of Tulsa County, Oklahoma, and subject to,

1. Rental Agreement dated October 16, 1963, with B & B Auto Parks for commercial parking space.

**FEE PROPERTIES
RENO COUNTY, KANSAS**

SW/4 NW/4 Section 12-23S-4W, containing 40 acres, situated in Reno County, Kansas and being the same lands described in Warranty Deed executed February 20, 1937, from H. F. Neufeld, and wife, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 195, page 430, of the records of Reno County, Kansas insofar as said instrument covers the surface estate only and subject to:

1. Right-of-Way Agreement with Drillers Production Company dated May 7, 1937.
2. Right-of-Way in favor of Cities Service Gas Company as per letter agreement of September 1, 1948.

**FEE PROPERTIES
GRAY COUNTY, TEXAS**

90 feet off the East end of Lot 1 in Block 20, South Side Addition to the Town of Pampa, situated in Gray County, Texas, being the same lands described in Warranty Deed dated March 27, 1925, from T. W. Johnson, et ux, Grantor, to H. F. Wilcox, Grantee, recorded May 15, 1925, reception number 8322, in the records of Gray County, Texas.

EXHIBIT C-3 — Page 8

ASSUMPTION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS, that for good and valuable consideration, receipt of which is hereby acknowledged, W X C COMPANY, a Delaware Corporation, (hereinafter called "W X C") for itself, its successors and assigns, from and after the date hereof, hereby assumes and agrees to pay, perform and discharge all debts, obligations, contracts and liabilities of Wilcox Oil Company, a Delaware Corporation, (hereinafter called "Wilcox") and its officers and directors when acting in such capacities, except for any actions based upon misfeasance or malfeasance, and when such debts, obligations, contracts and liabilities of Wilcox are imputed by law to such officers and directors, of any kind, character or description, whether accrued, absolute, contingent or otherwise, all as the same shall exist at the date hereof.

IN WITNESS WHEREOF, W X C COMPANY has caused these presence to be executed and its corporate seal hereunto affixed this 21st day of July, 1964.

ATTEST:

W X C COMPANY

M. H. Evans
Secretary

By H. O. McLaughlin
President

THE STATE OF TEXAS }

COUNTY OF HARRIS }

BEFORE ME, the undersigned authority, on this day personally appeared H. O. McLaughlin, known to me to be the person whose name is subscribed to the foregoing instrument, as President of W X C COMPANY, a corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 21st day of July, 1964.

Elsie Pecena
Notary Public

ELSIE PECENA
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965

CERTIFICATE

We, the undersigned, ALVIN L. CHAPMAN, as President, and CARL L. MILLER, as Senior Vice President and Treasurer, of WILCOX OIL COMPANY, a Delaware Corporation, (hereinafter called "WILCOX") do hereby certify, as follows:

1. The representations and warranties made by WILCOX in Article 1 of the Plan of Reorganization, dated May 13, 1964, as amended on May 21, 1964, among WILCOX, TENNESSEE GAS TRANSMISSION COMPANY, a Delaware Corporation, (hereinafter called "TENNESSEE") and W X C COMPANY, a Delaware Corporation (hereinafter called "W X C ") are true and correct in all material respects on and as of this date, with the same force and effect as though such representations and warranties had been made on and as of this date, except as affected by the transactions contemplated in the Plan of Reorganization or transactions approved in writing by W X C or changes occurring after May 13, 1964 in the ordinary course of business.
2. From March 31, 1964 to the date hereof, except for the execution and delivery of the Plan of Reorganization and the transactions contemplated thereby, WILCOX has conducted its business and affairs only in their ordinary course, or as has been expressly agreed to in writing on behalf of TENNESSEE and W X C. During such period, WILCOX did not knowingly take any action, other than in the ordinary course of business, which would change the conduct of its business and affairs from the manner in which such business and affairs were

conducted from December 31, 1964 to May 13, 1964. For this purpose, the terms and phrases used above shall have the same meanings set forth in the Plan of Reorganization.

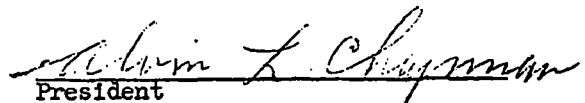
3. From May 13, 1964 to the date hereof, WILCOX has
- (a) not declared or paid any dividend or made any distribution of its properties or assets to its stockholders or allowed the issuance of any additional shares of its stock, except for a dividend of 25¢ payable on each share of WILCOX common stock outstanding on May 1, 1964, such dividend having been paid on May 22, 1964,
 - (b) not made any changes in its Articles of Incorporation or By-Laws, except as provided for in the Plan of Reorganization,
 - (c) not granted further restricted stock options to purchase shares of its common stock,
 - (d) not increased from and after April 13, 1964, the rate or form or compensation payable to any officers or employees of WILCOX, except as permitted by clause (iv) of paragraph 5.1 of the Plan of Reorganization,
 - (e) not disposed of any of its items of inventory, properties or other assets except in the ordinary course of business,
 - (f) not incurred any indebtedness except in the ordinary course of business nor allowed any material adverse change to be made in its financial affairs, nor allowed any tax or other


liability of WILCOX to be extended by waiver of the statutes of limitations or otherwise,

- (g) complied in all material respects with all applicable local, state and federal rules, laws, and regulations, and
- (h) granted to W X C, TENNESSEE, and their respective representatives free access to all of its properties and records in accordance with clause (viii) of paragraph 5.1 of the Plan of Reorganization.

4. From May 13, 1964 to the date hereof, no properties or assets of WILCOX have suffered any destruction or damage by fire, explosion or other calamity exceeding \$25,000.00 in value not covered by insurance.

WITNESS our hands and the seal of WILCOX OIL COMPANY, this 21st day of July, 1964.


President


Senior Vice President and
Treasurer

General Conveyance

WILCOX OIL COMPANY, GRANTOR

W X C COMPANY, GRANTEE

Dated July 21, 1964

General Conveyance

THE STATE OF OKLAHOMA }
COUNTY OF TULSA }

KNOW ALL MEN BY THESE PRESENTS, That:

WILCOX OIL COMPANY, a Delaware Corporation, (hereinafter called "Grantor") pursuant to a Plan of Reorganization dated May 13, 1964, among Grantor, Tennessee Gas Transmission Company, a Delaware corporation, and W X C Company, a Delaware Corporation, and for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable considerations to it in hand paid by W X C Company, a Delaware Corporation, (hereinafter called "Grantee") has GRANTED, BARGAINED, SOLD, TRANSFERRED, ASSIGNED, SET OVER and DELIVERED, and by these presents does GRANT, BARGAIN, SELL, TRANSFER, ASSIGN, SET OVER and DELIVER unto Grantee, subject only to the reservation by Grantor unto itself of the sum of One Hundred Thousand Dollars (\$100,000) to defray its remaining costs and expenses incident to carrying out the Plan of Reorganization and the costs and expenses incident to its final liquidation and dissolution, the following properties and assets of Grantor wheresoever situated, including, without limitation, all such properties and assets of Grantor situated in the States of Arkansas, Kansas, Louisiana, Mississippi, Montana, Nebraska, New Mexico, Oklahoma and Texas, to-wit:

1. All of the producing oil and gas leases and producing royalty, overriding royalty and mineral interests described in Exhibit A-1 attached hereto and made a part hereof;
2. All of the nonproducing oil and gas leases and nonproducing royalty, overriding royalty and mineral interests described in Exhibit A-2 attached hereto and made a part hereof;
3. All of Grantor's other interests in land (including, without limitation, all buildings and other improvements thereon) described in Exhibit A-3 attached hereto and made a part hereof;
4. All cash on hand and in banks, certificates of deposit, accounts receivable, bills receivable, promissory notes, commercial paper, acceptances, deposits and investments;
5. All producing and nonproducing oil, gas and mineral leases, royalties, overriding royalties, production payments, and fee and other interests and rights in oil, gas and other minerals, whether or not described in Exhibits A-1, A-2 and A-3;
6. All interests in and to all oil wells and/or gas wells, water wells, injection wells and other wells and mines used or obtained for use in connection with the exploration, development and production of oil, gas and other minerals;
7. All well, lease and mine equipment, personal property, fixtures, and facilities of every kind held or used in the exploration, development, operation or maintenance of oil, gas and mineral leases, mines or other interests;
8. All drilling rigs, work-over rigs, drilling barges or platforms, barges, boats or other marine equipment and related equipment parts, tools and accessories;
9. All gas (including casinghead gas) gathering lines and systems connected to any well or plant;
10. All oil, distillate, condensate, gasoline and other products gathering lines, pipelines, tanks, terminals, equipment, and other property used in transporting, handling or storing condensate, gasoline or other products or derivatives thereof and related equipment, machinery and facilities;
11. All meters, metering, testing and measuring equipment installed and operated to measure oil, gas or other minerals produced or delivered from producing properties, plants or other facilities;

12. All cycling plants, processing plants, compressor plants and other plants of any kind owned by Grantor and all related machinery, equipment, personal property and accessories held or used in connection therewith;
13. All inventories of oil, gas, casinghead gas, distillate, condensate and other hydrocarbons, chemicals or minerals of any kind, gasoline and other products above ground, in storage or in transit wheresoever situated;
14. All lands held in fee, under lease or otherwise, and the buildings, improvements and fixtures thereon, and all equipment, furnishings and supplies therein, including, without limitation, all warehouses and warehouse stock, casing and other materials, equipment and supplies used or usable in Grantor's operations;
15. All contracts for the purchase or sale of gas or casinghead gas, produced or delivered from any of the properties or plants covered hereby, and all contracts for the processing of gas or casinghead gas or for the purchase or sale or manufacture of oil, distillate, condensate, natural gasoline and other hydrocarbons or chemicals or products or derivatives thereof, or by the purchase of, sale of or relating to any other minerals;
16. All documents, lease agreements, muniments of title to and evidences of ownership of properties of Grantor;
17. All books, records and files;
18. All rights-of-way, easements, servitudes and other interests in land;
19. All contracts, agreements, licenses, options and other arrangements including, without limitation, construction contracts, operating and service contracts, contracts for electricity, water, gas, telephone and telegraph and other services, and all other contracts of every kind and nature, and all rights and benefits therein and thereunder accrued or to accrue;
20. All leases and leasehold interests in land and improvements thereon and rental contracts, whether verbal or written;
21. All policies of insurance of every kind and nature, all fidelity and other bonds and all rights and claims thereunder accrued or to accrue;
22. All tax refunds or claims therefor and all claims for abatement of taxes;
23. All claims against all persons, firms or corporations;
24. All demands, rights, equities and choses in action and the proceeds thereof;
25. All interests in litigation now pending for or against Grantor, and all demands and causes of action of whatsoever kind and nature;
26. All of the automobiles, trucks, trailers, tractors, lifts, hoists and other vehicles of rolling stock and all parts and accessories used or obtained for use in connection with any of Grantor's business;
27. All office furniture, fixtures and equipment, all stationery and office supplies, all typewriters, reproducing devices, calculators, adding machines, files and other office machinery and equipment;
28. All stocks and securities and evidences of equity interests in other corporations, associations and companies, including, without limitation, Grantor's interests in Oklahoma Hotel Building Company;
29. All rents, revenues, incomes and benefits and rights under any and all contracts, joint operating agreements, leases and other instruments of any kind;
30. All letters patent, applications for letters patent, licenses, applications for license under letters patent, trademarks, formulas, processes, copyrights and "know-how" and all rights under application for any thereof now pending or in abatement;

31. All of Grantor's good will;

32. All of Grantor's investments in notes, bonds, prepaid items and deposits;

33. All other property owned or claimed by Grantor, real, personal and/or mixed, whether in the possession of Grantor or of Grantor's agents, employees or nominees, in transit or in the possession of any other person, firm or corporation, and whether tangible or intangible;

it being the intention of Grantor to convey hereby all property of every kind and character, real, personal or mixed, wheresoever the same may be situated, owned, held or claimed by Grantor.

There is excepted from this Conveyance and reserved unto Grantor for the sole purpose of defraying Grantor's costs and expenses incident to the Plan of Reorganization dated May 13, 1964 and the final liquidation and dissolution of Grantor, the sum of One Hundred Thousand Dollars (\$100,000), which is on deposit with First National Bank & Trust Company, Tulsa, Oklahoma; and from and after the date hereof, the remainder of such reserved fund of One Hundred Thousand Dollars (\$100,000), when and if determined by Grantor not to be required to pay any such costs or expenses, shall be paid over to Grantee and shall thereafter be the property of Grantee.

TO HAVE AND TO HOLD the properties, assets, interests and rights hereby conveyed, together with all and singular the rights and privileges in any wise appertaining thereto, unto Grantee, its successors and assigns, forever.

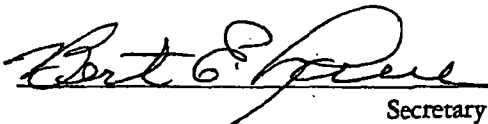
Grantor covenants to warrant and forever defend all and singular the properties, assets, interests and rights hereby assigned, transferred and conveyed unto Grantee, its successors and assigns, against the claims of every person whomsoever lawfully claiming or to claim the same, or any part thereof, of whatsoever nature made or suffered to be made by Grantor; and Grantee, its successors and assigns, is hereby substituted and subrogated in and to all warranties heretofore given by Grantor's predecessors in title.

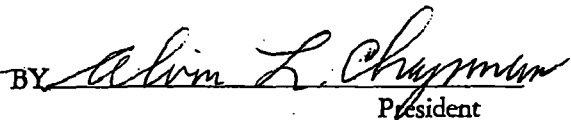
Grantor covenants and firmly obligates unto Grantee that it will cause its officers heretofore duly authorized, from time to time hereafter, upon request of Grantee, to make, execute, acknowledge and deliver any and all such further conveyances, deeds, acts, assignments, bills of sale and/or transfers as may be necessary or proper to assure unto Grantee all of the rights, titles and interests of Grantor in and to all or any part of the properties, assets, interests and rights hereby conveyed.

IN WITNESS WHEREOF, Grantor has caused this instrument to be executed by its officers thereunto duly authorized in a number of counter parts, all of which shall be read together and construed as but one and the same original instrument on this the 21st day of July, 1964, effective, however, as to purchasers of production at 7:00 A.M. in the time zone in which the respective properties are situated, on July 1, 1964.

ATTEST:

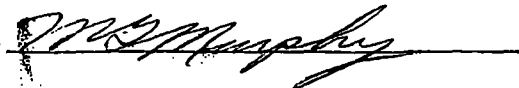
WILCOX OIL COMPANY


Secretary

BY 
President

WITNESSES:





THE STATE OF TEXAS }
COUNTY OF HARRIS }

The undersigned, a Notary Public duly qualified, commissioned, sworn and acting in and for the County and State aforesaid, does hereby certify that on this 21st day of July, 1964:

There appeared before me Alvin L. Chapman, President, and Bert E. Lane, Secretary, of Wilcox Oil Company, a Delaware corporation, and being a party to the foregoing instrument:

Before me appeared in person each such person, to me personally well known, who stated that they were the designated officers of such corporation, and were duly authorized in their respective capacities to execute the foregoing instrument for and in the name and behalf of said corporation, and further stated and acknowledged that they had so signed, executed and delivered said foregoing instrument for the consideration, uses and purposes therein mentioned and set forth. ARKANSAS

Be it remembered, that before me personally appeared each such person, who is personally known to me and known to me to be the designated officer of said corporation, and the same person who executed the foregoing instrument, and he duly acknowledged the execution of the same for and on behalf of and as the act and deed of said corporation. KANSAS

Be it known, That on this date, before me personally came and appeared each such person, to me personally known and known by me to be the person whose genuine signature is affixed to the foregoing document, who signed said document before me and in the presence of the two witnesses whose names are thereto subscribed as such, being competent witnesses, and who acknowledged, in my presence and in the presence of said witnesses, that he signed the above and foregoing document as his own free act and deed and for the uses and purposes therein set forth and apparent. LOUISIANA

In witness whereof, the said appearer has signed these presents and I have hereunto affixed my hand and seal together with the said witnesses on the day and date first above written.

Personally appeared before me each such person who acknowledged that he signed and delivered the foregoing instrument on the day and the year therein mentioned. MISSISSIPPI

Before me personally appeared each such person, known to me to be the designated officer of the corporation that executed the within instrument, and acknowledged to me that such corporation executed the same. MONTANA

Before me personally came each such person as the designated officer of such corporation, who is personally known to me to be the identical person whose name is affixed to the above instrument as the designated officer of such corporation, and acknowledged the instrument to be his voluntary act and deed and the voluntary act and deed of such corporation. NEBRASKA

The foregoing instrument was acknowledged before me this date by each such person as the designated officer of such corporation on behalf of said corporation. NEW MEXICO

Before me, on this date personally appeared each such person, to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as the designated officer and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth. OKLAHOMA

Before me personally appeared each such person, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the said corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated. TEXAS

IN WITNESS WHEREOF, I have hereunto set my hand and official seal this 21st day of July, 1964.

ELSIE PECENA

Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965



Notary Public in and for
Harris County, Texas

EXHIBIT A-1

TO THAT CERTAIN CONVEYANCE DATED JULY 21, 1964, BY AND BETWEEN WILCOX OIL COMPANY, GRANTOR, AND W X C COMPANY, GRANTEE.

PRODUCING LEASES ALFALFA COUNTY, OKLAHOMA

- 5589 Elmer Landreth
An undivided $\frac{1}{4}$ interest in Oil and Gas Lease dated October 8, 1951, from Elmer A. Landreth, et al, Lessor, to Carl E. Gungoll, Lessee, recorded in Book 108, page 349, covering the following described land:
160.00 acres being SE/4 Section 12-28N-9W
- 5145 Carl Morawitz
An undivided $\frac{1}{4}$ interest in Oil and Gas lease dated July 3, 1952, from Carl B. Morawitz, et ux, Lessor to Joe Harp, Lessee, recorded in Book 108, page 617, covering the following described land:
160.00 acres being NE/4 Section 12-28N-9W
- Each of the above leases provide for a $\frac{1}{4}$ royalty and each lease is subject to:
1. Operating Agreement dated February 3, 1955, between Wilcox Oil Company, et al, designating Viersen and Cochran as Operator.
- Wilcox Oil Company's Net Revenue Interest in Each Lease is 21.875%

PRODUCING MINERALS ALFALFA COUNTY, OKLAHOMA

- 1721 Andrew Wedel Royalty
An undivided $\frac{1}{2}$ interest in all the oil, gas and other minerals in and under:
Being 160 acres, more or less, SW/4 of Section 9-23N-9W I.M.
- Said interest is subject to:
1. Oil and Gas lease dated July 8, 1961 from Wilcox Oil Company to Aladdin Petroleum Company, recorded in Book _____, page _____ of the records of Alfalfa County, Oklahoma which lease provides for a $\frac{1}{4}$ royalty.
- Wilcox Net interest in production .062500 R.I.

PRODUCING LEASES BEAVER COUNTY, OKLAHOMA

- 4757 Blanche Ausmus
The following interest in Oil and Gas lease dated January 16, 1951, from H. A. Ausmus, et ux, Lessor, to Wilcox Oil Company, Lessee, recorded in Book 31 OG, page 570, covering the following described land:
An undivided $\frac{1}{2}$ interest in 160.00 acres being SW/4 Section 28-6N-22E CM and a full interest in 160.00 acres being NW/4 Section 33-6N-22E CM
- Said lease provides for a $\frac{1}{4}$ royalty and SW/4 Section 28 is subject to Operating Agreement dated December 18, 1959, between Apache Oil Corporation, Operator, and Wilcox Oil Company, et al, covering operations for the "Blucher Unit" in which Wilcox Oil Company has a 12.50% Working Interest and a 10.9375% Net Revenue Interest.

PRODUCING MINERALS BEAVER COUNTY, OKLAHOMA

- 2860 Edward Frantz #1
An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160 acres being SW/4 Section 2-2N-21E
- 2861 Edward Frantz #2
An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
160 acres being NW/4 Section 2-2N-21E
- The above two (2) interest being subject to Operating Agreement dated May 20, 1958, between Union Oil Company of California, Operator, and Wilcox Oil Company, et al, covering operations for the "Frantz 'A' Unit," in which Wilcox Oil Company's working interest and net revenue interest are both 25.00%

**PRODUCING LEASES
BECKHAM COUNTY, OKLAHOMA**

- 1985 O. H. Eggleston
Oil and Gas Lease dated March 23, 1945, from D. R. Grable, Lessor, to Carl S. Ford, Lessee, recorded in Book 52 mcl, page 498
- Oil and Gas lease dated March 29, 1945, from M. V. Mills, Lessor, to Robert E. Clark, Lessee, recorded in Book 52 mcl, page 512
- Oil and Gas lease dated March 16, 1945, from Cleo Walter, et ux, Lessor, to D. E. Wyatt, lessee, recorded in Book 52 mcl, page 434
- Oil and Gas lease dated March 21, 1945, from J. R. McGinley, Lessor, to Carl S. Ford, Lessee, recorded in Book 52 mcl, page 492
- Said leases collectively covering $\frac{1}{2}$ interest in the following described land:
160 acres being NW/4 Section 24-10N-21W
- Leases provide for $\frac{1}{2}$ royalty and all subject to "Elk City Hoxbar Sand Conglomerate Unit" — See remarks under Producing Minerals — File 1985.
- 5417 Joe Reel
Oil and Gas lease dated February 1, 1954, from Joe Reel, et ux, Lessor, to J. W. Darnell, Lessee, recorded in Book 118 of mcl, page 812, covering an undivided $\frac{1}{4}$ interest in
160 acres being S/2 NW/4, N/2 SW/4 Section 15-9N-22W
- Lease provides for a $\frac{1}{2}$ royalty and is subject to Operating Agreement dated December 7, 1956, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering SE/4 Section 8, S/2 Section 9, S/2 Section 10, E/2 Section 17, all Section 16, All Section 15, NE/4 Section 20, N/2 Section 21, N/2 Section 22-9N-22W, which "pools" all Working Interest and in which Wilcox Oil Company has an 800/3180 Interest. All interest and contract rights which Wilcox Oil Company owns in the lands covered by said Operating Agreement, and which were created by virtue of said Operating Agreement, are included herein. Operating Designations within the Area covered by said Operating Agreement are:
- 6161 1. Missouri Formation underlying N/2 Section 16-9N-22W unitized by Oklahoma Corporation Commission Order 45585 (C.D. 15036), Operated as Shell Oil Company — Armbruster (Missouri) lease.
- 6161 2. Springer Formation underlying SW/4 Section 10, NW/4 Section 15-19N-22W unitized by Oklahoma Corporation Commission Order 45586 (C.D. 15037), Operated as Shell Oil Company — C. Boyd (Springer) lease.
- 6162 3. Des Moines "A", Des Moines "B"-1, Des Moines "C" and Missouri Formations unitized by Oklahoma Corporation Commission Orders 45585 (C.D. 15036), 42347 (C.D. 13119) and 49688 (C.D. 13119), Operated as Shell Oil Company — Shadid Patten Unit, covering S/2 Section 9-9N-22W.
- 6164 4. Oil and Casinghead Gas underlying SW/4 Section 9-9N-22W, operated as Shell Oil Company—F. Shadid lease.
- 6286 5. *Missouri Formation underlying E/2 Section 8-9N-22W, unitized by Oklahoma Corporation Commission Order No. 45585 (C. D. 15036), Operated as Shell Oil Company — Whitledge (Missouri) Unit in which Wilcox owns 12.57862% of 7/8 Interest.
6. *Des Moines "A" Formation underlying E/2 Section 8-9N-22W unitized by Oklahoma Corporation Commission Order No. 42347 (C. D. 13119), Operated as Shell Oil Company — Whitledge (Des Moines "A") Unit in which Wilcox owns 12.57862% of 7/8 Interest.
- *Operating Agreement dated December 7, 1956, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, terminated as to SE/4 Section 8-9N-22W, and parties to said Agreement entered into a new Operating Agreement dated November 16, 1960, covering E/2 Sec. 8-9N-22W, operated as "Whitledge" unit.
- 5624 School Land #52
Oil and Gas lease dated July 18, 1955, from The State of Oklahoma (Lease No. OSEI-778), Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 129 mcl, page 111, covering all interest in
80 acres being S/2 NW/4 Section 8-9N-22W
Lease provides for a $\frac{1}{2}$ royalty.

EXHIBIT A-1 — Page 2

5625 School Land #53

Oil and Gas lease dated July 18, 1955, from The State of Oklahoma (Lease No. OSEI-779), Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 129 mcl, page 108, covering all interest in 80 acres being N/2 SW/4 Section 8-9N-22W
Lease provides for $\frac{1}{8}$ royalty.

5625-A Oliver Duggins

Oil and Gas lease dated August 12, 1953, from Oliver J. Duggins, et ux, Lessor, to H. G. Truitt, Lessee, recorded in Book 114 mcl, page 354, covering all interest in

80 acres being S/2 SW/4 Section 8-9N-22W

from the surface of the earth down to and including the depth of 9,292 feet.

Lease provides for a $\frac{1}{8}$ royalty and is further subject to a $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty on oil and oil well (casinghead) gas and a $\frac{1}{8}$ of $\frac{7}{8}$ overriding royalty on all gas well gas and all other hydrocarbons. Lease No. 5624, 5625 and 5625-A being subject to State of Oklahoma Corporation Commission Order No. 42347 which unitized production of oil and gas from Zone A of the Des Moines granite wash formation and Order No. 45585 which unitized oil and gas from Missouri (Hoxbar) formation under W/2 Section 8-9N-22W, Operated as "Duggins Unit," in which Wilcox Oil Company has net revenue interest of $\frac{47}{64}$ of $\frac{7}{8}$ W. I. on oil and $\frac{23}{32}$ of $\frac{7}{8}$ W. I. on gas.

5416 Elmer Cruze

Oil and Gas lease dated February 4, 1954, from Elmer T. Cruze, et ux, Lessor, to J. E. Shaw, Lessee, recorded in Book 118 mcl, page 483, covering an undivided $\frac{3}{4}$ interest in

320 acres being S/2 SE/4 Section 4, E/2 NE/4 Section 9, NW/4 Section 10-9N-22W

Lease provides for $\frac{1}{8}$ royalty and is subject to Operating Agreement dated January 8, 1962, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering N/2 Section 9-9N-22W, which "pools" all Working Interest, and in which Wilcox Oil Company has an 18.75% interest. All interest and Contract rights which Wilcox Oil Company owns in the lands covered by said Operating Agreement and which were created by virtue of said Agreement are included herein. Operating Designations within the Area covered by said Operating Agreement are:

- 5416-A
1. Missouri Formation, Des Moines "A" Formation and Des Moines "B"-1 Formation underlying N/2 Section 9-9N-22W unitized by Oklahoma Corporation Commission Orders 45585 (C.D. 15036), 47347 (C. D. 13119) and 49688 (C. D. 13119), Operated as Shell Oil Company — Cruze Cooper Unit in which Wilcox Oil Company has 18.75% of $\frac{7}{8}$ Interest.
 2. E/2 NW/4, W/2 NE/4 Section 9-9N-22W operated as Shell Oil Company — W. D. Cruze lease in which Wilcox Oil Company has 18.75% of $\frac{7}{8}$ Interest.

**PRODUCING MINERALS
BECKHAM COUNTY, OKLAHOMA**

1985 O. H. Eggleston

An undivided $\frac{1}{2}$ interest in all the oil, gas and other minerals in and under

320 acres being NW/4 Section 24, SE/4 SE/4 Section 14, E/2 NE/4, NE/4 SE/4 Section 23-10N-21W

Lands in Section 14 and 23 being subject to oil and gas lease dated September 5, 1946, from Wilcox Oil Company, Lessor to Shell Oil Company, Lessee, recorded in Book 55, page 878.

All land being subject to "Elk City" Hoxbar Sand Conglomerate Unit", approved by the Corporation Commission of the State of Oklahoma, October 27, 1950, in Cause C. D. No. 2846, Order 24158, as subsequently enlarged, and under which the participating factor for this acreage is .034500595.

**PRODUCING MINERALS
CARTER COUNTY, OKLAHOMA**

2574 H. L. Berry

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
SW/4 SW/4 SE/4 Section 5-3S-2W

Subject to Oil and Gas lease dated January 10, 1924, from Mrs. H. L. Berry, et ux, as Lessor, to Edward Galt, as Lessee, recorded in Book 70, Page 116, providing for $\frac{1}{8}$ royalty.

2575 Cubby F. Dillard

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
E/2 NW/4 NW/4; W/2 NE/4 NW/4 Section 22-4S-2W

Subject to Oil and Gas Lease dated September 20, 1916, from J. H. Dillard, et ux, as Lessor, to Frank L. Ketch, as Lessee, recorded in Book 30, Page 38, providing for $\frac{1}{8}$ royalty.

EXHIBIT A-1 — Page 3

**PRODUCING MINERALS
CLEVELAND COUNTY, OKLAHOMA**

1632 Geo. S. Linscott

An undivided 1/16 interest in and to the oil, gas and other minerals in and under NE/4 Section 22; N/2 and E/2 SE/4 and beginning at the NE/c of SW/4 Section 23, thence S. 103 3/11 rods, thence West 62 rods, thence N. 103 3/11 rods, thence East 62 rods to place of beginning and beginning at NW/c SE/4 Section 23, thence S. 66 rods, thence East 80 rods, thence N. 66 rods, thence West 80 rods to place of beginning; S/2 NW/4 Section 24-8N-2W

Subject to Operating Agreement dated March 23, 1957, between The Pure Oil Company, as Operator, and Wilcox Oil Company, as Non-Operator, and covering W/2 NW/4 Section 23-8N-2W, in which Wilcox Oil Company owns 6.25%.

Net interest in production is 6.2500%.

**PRODUCING LEASES
CREEK COUNTY, OKLAHOMA**

75-A Janie Heneha

All interest in and to Oil and Gas lease dated March 2, 1920 from Albert Kelley, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 396, insofar as said lease covers:
NE/4 Section 2-15N-8E

75-B Vivian Miles

All interest in and to Oil and Gas lease dated March 2, 1920, from Albert Kelley, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 396, insofar as said lease covers:
SE/4 NW/4, S/2 NE/4 NW/4 Section 2-15N-8E

Each of the above leases provide for a 1/8th Royalty Interest.
Net interest in production is .875000.

91 Melene Harjo

All interest in and to Oil and Gas lease dated January 7, 1919, from The Board of County Commissioners of Creek County, as Lessor, to Albert Kelley, as Lessee, recorded in Book 171, Page 280, insofar as said lease covers:
S/2 SW/4 Section 35-16N-8E; N/2 NE/4 NW/4 Section 2-15N-8E

Said lease provides for a 1/8 Royalty.

Net interest in production is .875000.

52 Eddie Barnett

All interest in and to Oil and Gas lease dated October 25, 1919, from Wash Sanders, Gdn., as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 71, covering:
SW/4 SW/4, S/2 NW/4 SW/4 Section 25-16N-9E

Said lease provides for a 1/8 Royalty.

Net interest in production is 87.5000%.

181 Lucy Barnett

All interest in and to Oil and Gas lease dated December 22, 1919, from George R. McConnell, et al, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 215, covering:
N/2 NW/4, SW/4 NW/4, Section 25-16N-9E

Said lease provides for 1/8 Royalty.

Net interest in production is 87.5000%.

456 Tullemarsey Scott

All interest in and to Oil and Gas lease dated October 21, 1922, from C. C. Kimble, et al, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 273, Page 315, covering:
S/2 NE/4, N/2 N/2 NE/4 NE/4, W/2 NW/4 NE/4, SE/4 NW/4 NE/4, S/2 NE/4 NE/4, S/2 N/2 NE/4 NE/4, E/2 NE/4 NW/4 SE/4, W/2 NW/4 NE/4 SE/4 Section 20-14N-10E

Said lease provides for a 1/8 Royalty.

Net interest in production is 87.5000%.

EXHIBIT A-1 — Page 4

- 31 Willie Stepney
All interest in and to Oil and Gas lease dated August 30, 1918, from Mary Nash, et al, as Lessor, to H. F. Maddox, as Lessee, recorded in Book 171, Page 253, covering:
SW/4, less 17.78 acres in NE/4 SW/4 Section 24-15N-10E

Said lease provides for $\frac{1}{8}$ Royalty.
Net interest in production is 87.5000%.
- 3109 Alice Deere
Oil and Gas lease dated May 11, 1939, from J. W. Adams, as Lessor, to F. D. Williams, as Lessee, recorded in Book 455, Page 212, covering:
Full interest in SW/4 NE/4 Section 34-14N-7E; An undivided $\frac{1}{4}$ interest in SE/4 NE/4 Section 34-14N-7E.

Said lease provides for a $\frac{1}{8}$ Royalty subject to:
Operating Agreement dated February 1, 1956, between Wilcox Oil Company, as Operator, and Sunray Mid-Continent Oil Company, et al as non-Operator, covering SE/4 NE/4, Section 34-14N-7E, in which Wilcox Oil Company owns a 25.0000% W. I.
- 3423 Liley Stepney
An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated March 15, 1940, from J. B. Castle, et al, as Lessor, to Bryan Petroleum Company, as Lessee, recorded in Book 458, Page 208, covering:
SW/4 Section 35-14N-7E

Said lease provides for a $\frac{1}{8}$ Royalty subject to:
Operating Agreement dated February 1, 1956, between Wilcox Oil Company, as Operator, and Bryan Interests, Inc., et al, as non-Operator, covering SW/4 Section 35-14N-7E, in which Wilcox Oil Company owns a 50% W. I.

Net interest in production is 43.7500%.
- 3401 S. Stepney "B" (Community)
An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 18, 1939, from J. W. Adams, et ux, as Lessor, to Fred Phillips, as Lessee, recorded in Book 455, Page 298, covering:
E/2 SW/4 Section 26; W/2 NW/4 Section 35-14N-7E

Said lease provides for a $\frac{1}{8}$ Royalty subject to:
Operating Agreement dated February 1, 1956, between Wilcox Oil Company, as Operator, and Sunray Mid-Continent Oil Company, et al, as non-Operator, covering W/2 NW/4, less NW/4 SW/4 NW/4, Section 35-14N-7E, in which Wilcox Oil Company owns a 25.000% W.I.

Net interest in production is 21.8750%.
- 5463 Wagner Bogy
An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated June 19, 1954, from Glenn A. Young, as Lessor, to Pearl B. Jackson, as Lessee, recorded in Book 710, Page 525, covering:
E/2 SE/4 Section 22-18N-10E

Lease provides for a $\frac{1}{8}$ Royalty subject to:
 1. An overriding royalty of 1/16 of 7/8.
 2. Operating Agreement dated September 1, 1954, between Wilcox Oil Company, as Operator, and Pearl B. Jackson, as non-Operator, covering E/2 SE/4 Section 22-18N-10E, in which Wilcox Oil Company owns a 50.0000% W.I.
Net interest in production is 41.01562%.
- 5478 Sissie Stepney "C"
All interest in and to Oil and Gas lease dated October 18, 1939, from J. W. Adams, et ux, as Lessor, to Fred Phillips, as Lessee, recorded in Book 455, Page 298, insofar as said lease covers:
NW/4 SW/4 NW/4 Section 35-14N-7E

Net interest in production is 87.5000%.

62A&B Bruce Tiger and
Wilcox Tiger

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 29, 1959, from Stella Killgore, et vir, as Lessor, and Wilcox Oil Company, as Lessee, recorded in Book 857, Page 539, covering:
S/2 NE/4 Section 13-16N-9E

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 29, 1959, from Roy Dorrell, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 857, Page 541, covering:
S/2 NE/4 Section 13-16N-9E

Said lease provides for a $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

63 Hensley Tiger

All interest in and to Oil and Gas lease dated April 10, 1920, from W. E. Hensley, et ux, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, Page 441, covering:
NE/4 NE/4, E/2 NW/4 NE/4, Section 13-16N-9E

Said lease provides for a $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

348 Salome Tiger

All interest in and to Oil and Gas lease dated June 26, 1919, from M. F. Pritchett, et ux, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 171, Page 559, covering:
E/2 SE/4 Section 12-16N-9E

Said lease provides for a $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

53 Lewis Bruner

All interest in and to Oil and Gas lease dated January 4, 1916, from P. B. J. Hudson, Gdn. of Est. of Lewis Bruner, as Lessor, to A. L. Harris, as Lessee, recorded in Book 126, Page 340, insofar as said lease covers:
West 20 acres of Lot 1 and West 20 acres of Lot 2 of NW/4 Section 18-16N-10E

Said lease provides for $\frac{1}{8}$ Royalty.

Net interest in production is 87.5000%.

Leases 62 A&B, 63, 348, 53 above are subject to

Plan of Unitization for the Tiger Dutcher Sand, dated December 30, 1959, between Wilcox Oil Company, as Operator, and Kirby Production Company, et al, as non-Operator, covering SE/4 SE/4 Section 12; NE/4 NE/4, E/2 NW/4 NE/4, S/2 NE/4, Section 13-16N-9E; West 20 acres of Lot 1 and West 20 acres of Lot 2, Section 18-16N-10E, in which Wilcox Oil Company owns 100% W. I.

6157 Roy Dorrell

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated August 5, 1963, from Roy Dorrell, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 989, Page 626, covering:
Lots 3 and 4 in SW/4 Section 18-16N-10E.

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 10.9375%.

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 31, 1963, from George Louis Slyman, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 945, Page 73, covering:
Lots 3 and 4 in SW/4 Section 18-16N-10E

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 82.8125%.

6158 Van Barrett

An undivided $\frac{1}{40}$ interest in and to Oil and Gas lease dated October 24, 1963, from J. Dyle Carmen, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 951, Page 136, covering:
SW/4 SE/4, SE/4 SW/4 Section 18-16N-9E

Lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 1.09375%.

An undivided $\frac{1}{2}$ interest in SE/4 SW/4, an undivided $\frac{1}{2}$ interest in S/2 SW/4 SE/4, an undivided $\frac{1}{4}$ interest in N/2 SW/4 SE/4, an undivided $\frac{1}{4}$ interest in S/2 NE/4 SW/4 as covered in Oil and Gas lease dated August 15, 1963, from Van Barrett, et ux, as Lessor, to Wilcox Oil Company, recorded in Book 949, Page 610.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 14.58333%.

An undivided 50/560 interest in and to Oil and Gas lease dated August 12, 1963, from The First National Bank and Trust Company of Oklahoma City, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 954, Page 110, covering S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 3.90625%.

An undivided 1/28 interest in and to Oil and Gas lease dated August 12, 1963, from Elva Wolfe, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 954, Page 112, covering S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.5625%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 24, 1963, from John P. Carman, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 612, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 22, 1963, from Gertrude Chenoweth, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 614, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 22, 1963, from Yukola Palmer, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 620, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 1/40 interest in and to Oil and Gas lease dated October 22, 1963, from Gladys Carman McAdams, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 618, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.09375%.

An undivided 3/64 interest in and to Oil and Gas lease dated September 3, 1963, from Fay Adelaide McKiddy, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 622, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 2.05078%.

An undivided 1/64 interest in and to Oil and Gas lease dated September 5, 1963, from John S. Humphrey, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 624, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 0.68359%.

An undivided 1/32 interest in and to Oil and Gas lease dated August 12, 1963, from Marjorie Bullis, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 626, covering SW/4 SE/4, SE/4 SW/4 Section 13-16N-9E.

Lease provides for $\frac{1}{4}$ royalty.

Net interest in production is 1.86719%.

EXHIBIT A-1 — Page 7

An undivided 4/320 interest in and to Oil and Gas lease dated August 12, 1963, from Elva Wolfe, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 628, covering SE/4 SW/4, SW/4 SE/4 Section 13-16N-9E.
Lease provides for 1/8 royalty.

Net interest in production is 0.546875%.

An undivided 9/60 interest in and to Oil and Gas lease dated August 12, 1963, from E. P. Kirschner, Trustee, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 630, covering SE/4 SW/4, S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for 1/8 royalty.

Net interest in production is 6.56250%.

An undivided 1/60 interest in and to Oil and Gas lease dated November 7, 1963, from A. J. Pfister, as Lessor, to Wilcox Oil Company as Lessee, recorded in Book 949, Page 632, covering SE/4 SW/4, S/2 NE/4 SW/4, Section 13-16N-9E.

Lease provides for 1/8 royalty.

Net interest in production is 0.72916%.

An undivided 1/16 interest in and to Oil and Gas lease dated December 16, 1963, from Fred X Sulzbach, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 634, covering W/2 SW/4 SE/4 Section 13-16N-9E.

Lease provides for 1/8 royalty.

Net interest in production is 2.734375%.

An undivided 1/32 interest in and to Oil and Gas lease dated December 11, 1963, from Alberta V. Humphrey, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 949, Page 616, covering N/2 SW/4 SE/4 Section 13-16N-9E.

Lease provides for 1/8 royalty.

Net interest in production is 1.36719%.

6159 Claud James

Oil and Gas lease covering an undivided 1/2 interest in and to W/2 SE/4 SE/4 and full interest in E/2 SE/4 SE/4, dated August 6, 1963, from Kenneth Dale James, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 944, Page 47, covering above lands Section 13-16N-9E.

Lease provides for 1/8 royalty.

Net interest in production is 21.8750%.

An undivided 1/4 interest in and to Oil and Gas lease dated August 13, 1963, from Mack L. Dunham, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 944, Page 43, covering W/2 SE/4 SE/4, Section 13-16N-9E.

Lease provides for 1/8 royalty.

Net interest in production is 10.9375%.

An undivided 1/4 interest in and to Oil and Gas lease dated August 9, 1963, from Viney May Murphy, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 944, Page 45, covering W/2 SE/4 SE/4 Section 13-16N-9E.

Lease provides for 1/8 royalty.

Net interest in production is 10.9375%.

Leases 6157, 6158 and 6159 above subject to:

1. Plan of Unitization for the Barrett Dutcher Sand Unit, dated November 13, 1963, between Wilcox Oil Company, as Operator, and Sunray DX Oil Company, as non-Operator, covering NE/4 SW/4, N/2 SE/4, SE/4 SW/4, SW/4 SE/4, SE/4 SE/4, Section 13-16N-9E; Lot 3 in SW/4, Section 13-16N-10E, in which Wilcox Oil Company owns 50.0000% W. I.

Net interest in production in the above tracts is as follows:

SE/4 SW/4	20.9375%
S/2 SW/4 SE/4	40.4688%
N/2 SW/4 SE/4	41.2500%
S/2 NE/4 SW/4	9.9744%

- 1245 Daniel Hope
All interest in and to Oil and Gas lease dated February 5, 1924, from Daniel Hope, et ux, as Lessor, to G. C. Hall, as Lessee, recorded in Book 262, Page 160, covering:
W/2 SW/4, SE/4 SW/4 Section 3-17N-9E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 15.90575%.
- 422 Sarah Lindsey
All interest in and to Oil and Gas Mining lease dated July 6, 1922, from Sarah Tiger, et vir, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 263, Page 52, (Department Lease 46273, Contract No. 6621), covering:
E/2 NE/4, NW/4 SE/4, Section 10-17N-9E; NW/4 SW/4 Section 11-17N-9E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 15.90575%.
- Leases 1245 and 422 above subject to:
Plan of Unitization Bruce Pool Prue Sand Unit dated November 11, 1960, between Sinclair Oil and Gas Company, as Operator, and Wilcox Oil Company, et al, as non-Operator, covering:
SW/4 SW/4 SW/4, Section 2; NE/4, SE/4 NW/4, S/2 NE/4 NW/4, S/2 SW/4 NW/4, SE/4 NW/4 NW/4, S/2 Section 3; S/2 SE/4, NE/4, NE/4 SE/4, N/2 SE/4 SE/4, Section 4; E 3/4 NW/4, NE/4, NE/4 NE/4 SW/4, E/2 SE/4 SW/4, W/2 SE/4 Section 10; W/2 W/2 NW/4, Section 11-17N-9E, in which Wilcox Oil Company owns an 18.178% W. I.
Net interest in production is 11.10575%.
- 5401 Ernest Anthis
All interest in and to Oil and Gas lease dated March 19, 1954, from Ernest R. Anthis, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 701, Page 599, covering:
E/2 NW/4, NE/4 SW/4 Section 22-18N-10E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 52.01837%.
- 5400 Pearl Waggoner
An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated January 11, 1954, from Pearl J. Waggoner, as Lessor, and Wilcox Oil Company, as Lessee, recorded in Book 701, Page 595, covering:
W/2 NE/4, W/2 SE/4 Section 22-18N-10E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 26.00919%.
- An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated March 10, 1954, from The First National Bank and Trust Company of Oklahoma City, Executor of the Estate of Rosa B. Wright Rettenmeyer, Deceased, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 701, Page 597, covering:
W/2 E/2 Section 22-18N-10E
Lease provides for $\frac{1}{8}$ royalty.
Net interest in production is 26.00919%.
- 6613 Cook-Anthis
An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease dated April 22, 1954, from Ida B. Anthis, et al, as Lessor, to Marshall Drilling Company, as Lessee, recorded in Book 705, Page 239, covering:
N/2 NW/4 Section 15-18N-10E
An undivided $\frac{1}{2}$ interest in Oil and Gas lease dated April 22, 1954, from Monta V. Martindale, et al, as Lessor, to Marshall Drilling Company, recorded in Book 705, Page 241, covering:
N/2 NW/4 Section 15-18N-10E
An undivided $\frac{1}{2}$ interest in Oil and Gas lease dated April 22, 1954, from Myrtle Wright, et vir, as Lessor, to Marshall Drilling Company, as Lessee, recorded in Book 705, Page 243, covering:
N/2 NW/4 Section 15-18N-10E
Leases under 6613 above provide for $\frac{1}{8}$ royalty subject to $\frac{1}{24}$ of $\frac{7}{8}$ overriding royalty.
Net interest in production from leases under 6613 above is 18.69408%.

EXHIBIT A-1 — Page 9

5447 Jackson-Lee (Stanley #1)

An undivided $\frac{1}{2}$ interest in and to Oil and Gas lease from Pearl B. Jackson Company, a trust estate, as Lessor, to Pearl B. Jackson, lessee, recorded in Book 711, Page 346, covering:

E/2 NW/4 SW/4 SE/4, SW/4 NW/4, SW/4 SE/4, E/2 SW/4 SE/4, NE/4 SW/4, NW/4 SE/4 SW/4, W/2 NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SW/4 SW/4 SE/4, E/2 E/2 NW/4 SE/4, SE/4 NW/4, Section 15-18N-10E

Said lease provides for a $\frac{1}{4}$ Royalty subject to:

1. Operating Agreement dated January 16, 1956, between Wilcox Oil Company, as Operator, and Pearl B. Jackson, as non-Operator, covering E/2 NW/4, SW/4 SE/4, SW/4 NW/4 SW/4 SE/4, E/2 SW/4 SE/4, NE/4 SW/4, NW/4 SE/4 SW/4, W/2 NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SW/4 SW/4 SE/4, E/2 E/2 NW/4 SE/4, SE/4 NW/4, Section 15-18N-10E, in which Wilcox Oil Company owns a 50.0000% W. I.

Net interest in production insofar as lease is subject to (1.) above is 43.7500%.

Leases 5401, 5400, 5447 and 6613 above are subject to:

Plan of Unitization for the Red Fork Sand, Between Wilcox Oil Company, as Operator, and D. H. Cook, et al, as non-Operator, covering E/2 NW/4, W/2 NW/4 NE/4, E/2 NE/4 SW/4, E/2 SE/4 SW/4, less E/2 NE/4 SE/4 SW/4, SW/4 SE/4, less NW/4 NW/4 SW/4 SE/4, Section 15; E/2 E/2 NW/4, NW/4 NE/4, W/2 SW/4 NW/4 Section 22-18N-10E, in which Wilcox Oil Company owns a 59.4495% W. I.

AN UNDIVIDED 23.008% INTEREST IN THE FOLLOWING OIL AND GAS LEASES

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6-10-60		Investors Royalty Company Inc.	NE/4 NE/4 or Lot 1, Section 3-17N-9E	872	266
6-10-60		Katherine Greenhaw	NE/4 NE/4 or Lot 1, Section 3-17N-9E	872	268
6-10-60		Margaret Rorschach, et vir	NE/4 NE/4 or Lot 1, Section 3-17N-9E	873	347
6-10-60		Richard Milford Pfennighausen	NE/4 NE/4 or Lot 1 & SE/4 NE/4, Section 3-17N-9E	873	349
5- 1-61		C. P. Quinlan (said lease being subject to 1/16 of 7/8 overriding royalty reserved by C. P. Quinlan)	SE/4 NE/4, Section 3-17N-9E	891	635
4-28-61		Abner Bruce, et ux	SW/4 SE/4 Section 10-17N-9E	908	376
4-28-61		Virginia Masterson, et vir	SW/4 SE/4 Section 10-17N-9E	900	378
4-28-61		Claude R. Bruce, et ux	SW/4 SE/4 Section 10-17N-9E	900	380
4-28-61		Hattie Mae Wallace, et vir	SW/4 SE/4 Section 10-17N-9E	900	382
4-28-61		A. J. Kriete, et ux	SW/4 SE/4 Section 10-17N-9E	900	384
4-28-61		Leo Bruce	SW/4 SE/4 Section 10-17N-9E	900	386
4-28-61		Alvina A. Harlin, sole and only Heir	SW/4 SE/4 Section 10-17N-9E	900	388
4-28-61		Loyd Bruce, et ux	SW/4 SE/4 Section 10-17N-9E	900	390
4-28-61		Willie Browne, et vir	SW/4 SE/4 Section 10-17N-9E	900	392
4-28-61		June Sandal, et vir	SW/4 SE/4 Section 10-17N-9E	900	394
4-28-61		Mae Bristol, et vir	SW/4 SE/4 Section 10-17N-9E	900	396
4-28-61		Nick Pantelakes	SW/4 SE/4 Section 10-17N-9E	900	398
4-28-61		Plezzie Livingston, et vir	SW/4 SE/4 Section 10-17N-9E	900	372
4-28-61		Coleman R. Bruce, et ux	SW/4 SE/4 Section 10-17N-9E	900	374
4-28-61		Browder F. Bruce, et ux	SW/4 SE/4 Section 10-17N-9E		
4-28-61		Lucas D. Bruce	SW/4 SE/4 Section 10-17N-9E		

**PRODUCING MINERALS
CREEK COUNTY, OKLAHOMA**

- 81 Willie Stepney
An undivided 2/34ths of 17.78/142.22nds of 1/8ths interest in and to the oil, gas and other minerals in and under
SW/4, less 17.78 acres in NE/4 SW/4, Section 24-15N-10E
- 62 Bruce Tiger and Wilcox Tiger
An undivided 1/2 interest in and to the oil, gas and other minerals in and under
S/2 NE/4 Section 13-16N-9E
- Said mineral interest subject to:
1. Plan of Unitization dated December 30, 1959, between Wilcox Oil Company, as Operator, and Kirby Production Company, et al, as Non-Operators, covering SE/4 SE/4 Section 12; NE/4 NE/4, E/2 NW/4 NE/4, S/2 NE/4 Section 13-16N-9E; West 20 acres of Lot 1 and West 20 acres of Lot 2, Section 18-16N-10E
- 181 Lucy Barnett
An undivided 1/320 interest in and to the oil, gas and other minerals in and under
N/2 NW/4, SW/4 NW/4 Section 25-16N-9E
and undivided 4/320 interest in and to the oil, gas and other minerals in and under
N/2 NW/4, SW/4 NW/4 Section 25-16N-9E
- The above interests are subject to:
1. Oil and Gas lease dated December 22, 1919, from George R. McConnell, et al, as Lessor, to H. F. Wilcox, as Lessee, recorded in Book 207, page 215, providing for 1/8 royalty.
- 2578 Mattie Coachman
An undivided 1/24 interest in and to oil, gas and other minerals in and under
W/2 NE/4 Section 20-17N-7E

**PRODUCING OVERRIDING ROYALTY
CREEK COUNTY, OKLAHOMA**

- 1245 Daniel Hope
An undivided 1/16th of 8/8ths overriding royalty as reserved in Assignment dated April 8, 1940, from H. F. Wilcox Oil and Gas Company, as Assignor, to L. B. Jackson, as Assignee, recorded in Book _____, page _____, and amended by instrument dated May 19, 1941, recorded in Book _____, page _____ covering
NE/4 NW/4 SW/4 Section 8-17N-9E
- Said overriding royalty subject to:
1. Plan of Unitization Bruce Pool Prue Sand Unit dated November 11, 1960, between Sinclair Oil & Gas Company, as Operator, and Wilcox Oil Company, et al, as Non-Operators, covering SW/4 SW/4 SW/4, Section 2; NE/4, SE/4 NW/4, S/2 NE/4 NW/4, S/2 SW/4 NW/4, SE/4 NW/4 NW/4, S/2, Section 3; S/2 SE/4, NE/4, NE/4 SE/4, N/2 SE/4 SE/4 Section 4; E 3/4 NW/4, NE/4, NE/4 NE/4 SW/4, E/2 SE/4 SW/4, W/2 SE/4 Section 10; W/2 W/2 NW/4, Section 11-17N-9E, in which Wilcox Oil Company owns an 18.178% W. I.

**PRODUCING LEASES
CUSTER COUNTY, OKLAHOMA**

- 5429 Pearl Presnell
Oil and Gas lease dated April 29, 1954 by and between Pearl Hammons et al, as Lessors, and O. Anderson, as Lessee, recorded in Book 41 miscl., pages 262-3, covering all interest in:
240 acres, more or less, being S/2 NE/4 and NW/4 (less Railroad Right-of-way) of Section 20-15N-14W
- Said lease provides for a 1/8 royalty and is subject to that certain Operating Agreement, dated December 11, 1963, by and between Sun Oil Company, as Operator and Wilcox Oil Company et al, as Non-Operators, covering all of Section 20-15N-14W, operated as the Pearl Presnell Unit, in which Wilcox owns a 37.50% Working Interest and a 32.8125% Net Revenue Interest.
- 6188-A Burgtorf (Custer City) Unit
An undivided interest in the following described Oil and Gas Leases:
1. Oil and Gas Lease dated November 16, 1957, by and between C. A. Burgtorf et ux, as Lessor, and Eason Oil Company, as Lessee, recorded in Book 24, pages 3-4, records of Custer County, Oklahoma, INsofar AND ONLY INsofar AS SAID LEASE COVERS:
Lots 1, 2, 3, 4, 5 and SE/4 NW/4 in Section 6-13N-15W
and ratified by Richard H. Burgtorf, M. D. by ratification instrument dated November 16, 1957 and recorded in Book 40, page 595 of the records of said County.

EXHIBIT A-1 — Page 11

2. Oil and Gas Lease dated March 25, 1958 by and between Thomas A. Schneider et ux, as Lessor, and R. B. Strong, as Lessee, recorded in Book 24, pages 591-92 of the records of Custer County, Oklahoma, INsofar AND ONLY INsofar AS SAID LEASE COVERS:
The SW/4 of Section 6-13N-15W
3. Oil and Gas Lease dated February 26, 1958, by and between Thomas A. Schneider et ux, as Lessor, and Tidewater Oil Company, as Lessee, recorded in Book 86 misc., pages 277-8 of the records of Custer County, Oklahoma, covering:
SE/4 and S/2 NE/4 of Section 6-13N-15W

said interests in the above described Oil and Gas leases having been acquired by Wilcox Oil Company by virtue of that certain Operating Agreement, dated November 21, 1958, as amended by and between Gulf Oil Corporation, as Operator and Wilcox Oil Company et al, as Non-Operators. Each of the above described leases provide for 1/8th royalty and Wilcox Oil Company's interests are as follows:

6.7826% of 7/8 W. I.	.059348
Plus 7.2541% of 6.5% of 7/8 W. I.	.004126*

*This interest will revert to Kenneth A. Spencer when the working interest owners have received 300% of Spencer's share of the cost of completing the BURGTORF NO. 1 WELL.

PRODUCING LEASES ELLIS COUNTY, OKLAHOMA

6295 H. A. Jontra

Oil and Gas lease, dated December 31, 1955 by and between H. A. Jontra et ux, as Lessor, and W. B. McNeal, as Lessee, recorded in Book 78, pages 182-3, covering all interest in:

80 acres, being W/2 NE/4 Section 11-22N-25W

said lease provides for 3/8 royalty and is also subject to an overriding royalty of 1/16 of 7/8ths, which is owned by Poor Boy Oil Company. Said lease is further subject to that certain Operating Agreement, dated February 13, 1963, by and between Pan American Oil Corporation, as Operator, and Wilcox Oil Company et al, as Non-Operators, Operated as Fields Unit, covering:

All of Section 11-22N-25W

in which Wilcox owns 12.50% interest by virtue of the inclusion of the above described Oil and Gas lease in said Unit.

PRODUCING MINERALS ELLIS COUNTY, OKLAHOMA

2242 Charles J. White

An undivided 1/2 interest in and to all of the oil, gas and other minerals in and under and that may be produced from

200 Acres, being SW/4 and NW/4 NE/4 of Section 1-23N-26W

All of said mineral interest being subject to that certain Operating Agreement, dated February 10, 1960, by and between Phillips Petroleum Company, as Operator, and Wilcox Oil Company et al, as Non-Operators, covering all of Section 1-23N-26W, Operated as the White "A" Unit, in which Wilcox owns .1562125, Working Interest plus .1562125 Royalty Interest

2257 George Hunter

An undivided 1/2 interest in and to all of the oil, gas and other minerals in and under and that may be produced from:

480 acres, being S/2, S/2 NE/4 and S/2 NW/4 Section 10-22N-25W

Said mineral interest is subject to the following:

1. Oil and Gas lease dated May 26, 1961, recorded in Book 122, page 117, as amended by instrument dated July 19, 1961, recorded in Book 123, page 285-7, by and between Wilcox Oil Company, as Lessor and Pan American Petroleum Corporation, as Lessee, covering an undivided 160 acre interest in the above described tract.
2. Operating Agreement dated June 14, 1961, by and between Pan American Petroleum Corporation, as Operator, and Wilcox Oil Company, as Non-Operator, Operated as the Hunter Unit, covering:
All of Section 10-22N-25W

in which Wilcox owns 12.50% of 7/8 Working Interest and a .0537110 Net Royalty interest.

**PRODUCING MINERALS
GARVIN COUNTY, OKLAHOMA**

947 N. R. Farris Royalty

An undivided $\frac{1}{2}$ interest in and to all of the oil, gas, coal and other minerals in or under:
Being 80 acres, more or less, E/2 SW/4 Section 28-3N-3W I. M.

Said interest is subject to:

1. Panther Creek Hart Sand Unit Agreement between Phillips Petroleum Company, Operator and Wilcox Oil Company, et al, Non-Operators forming a 6,640 acre Unit for production of oil and gas from the Hart Sand.

Wilcox Net Interest in Unit .5178295

**PRODUCING LEASES
GRANT COUNTY, OKLAHOMA**

5557 Minnie Burghardt

Oil and Gas Lease, dated October 5, 1951, by and between Minnie Burghardt et vir, as Lessor and J. Floyd Brown, as Lessee, recorded in Book 100, page 494, covering an undivided one-fourth interest in: 159.62 acres, being all of Lots 3, 4 and E/2 SW/4 Section 7-28N-8W

Subject to Operating Agreement dated February 3, 1955, between Wilcox Oil Company, et al, designating Viersen and Cochran as Operator.

5588 Alice Greer

Oil and Gas Lease, dated October 30, 1951, by and between Alice Greer, a widow, as Lessor and Carl E. Gungoll, as Lessee, recorded in Book 116, page 452, covering an undivided one-fourth ($\frac{1}{4}$) interest in: 159.36 acres, being all of the NW/4 Section 7-28N-8W

Subject to Operating Agreement dated February 3, 1955, between Wilcox Oil Company, et al, designating Viersen and Cochran as Operator.

4986 Forest Gordon

Oil and Gas Lease, dated October 31, 1951, by and between Forest Lee Gordon et ux, as Lessor and Wilcox Oil Company, as Lessee, recorded in Book 105, page 542, covering all interest in: 160 acres being NE/4 Section 25-28N-6W

4896 Fred Matthews

Oil and Gas Lease, dated September 20, 1951, by and between Fred Matthews et ux, as Lessors, and Wilcox Oil Company, as Lessee, recorded in Book 106, page 118, of the records of Grant County, Oklahoma, as amended by instrument dated December 7, 1957, recorded in Book 156, page 187, and covering all interest in:

160 acres, being all of SE/4 Section 18-28N-7W

This lease provides for 1/8th royalty and is subject to the following:

1. Declaration of Pooling, dated June 18, 1957, by and between Wilcox Oil Company and Calvert Drilling, Inc., recorded in Book 156, page 236, pooling the above described lease with Calvert's lease creating an operating unit for gas production covering SE/4 and S/2 NE/4 Section 18-28N-7W.
2. Operating Agreement, dated June 18, 1957, between Wilcox Oil Company, as Operator, and Calvert Drilling, Inc., as Non-Operator, covering operations under the above described Declaration of Pooling. Wilcox owns $\frac{1}{2}$ of $\frac{1}{2}$ W. I. and 58.3333% of the Total Production.

4906 Arthur Green

Oil and Gas Lease, dated September 19, 1951, as amended by and between Arthur E. Green et ux, as Lessors, and Wilcox Oil Company, as Lessee, recorded in Book 106, page 124, of the records of Grant County, Oklahoma, covering all interest in:

160 acres, being all of NW/4 Section 13-28N-7W

This lease provides for 1/8th royalty and is subject to the following:

1. Declaration of Pooling, dated July 1, 1957, by and between Wilcox Oil Company et al, pooling the above described lease with other lands creating an Operating Unit for the production of gas, gas distillate and condensate covering NW/4 Section 13 and SW/4 Section 12-28N-7W.
2. Operating Agreement, dated June 25, 1957, between Woods Petroleum Corporation, as Operator, and Wilcox Oil Company et al, as Non-Operators, operated as Green "B" Unit, covering operations under the above described Unit. Wilcox owns 50% Working Interest and 43.7500% Net Revenue Interest.

**PRODUCING MINERALS
GRANT COUNTY, OKLAHOMA**

5555 Mary Leisure

An undivided $\frac{1}{4}$ of $\frac{3}{32}$ of $\frac{7}{8}$ overriding royalty interest in and to:
160 acres, more or less, being NE/4 of Section 7-28N-8W

Said Interest is subject to:

1. Corporation Commission Order dated December 30, 1960 adding 120 acres to gas producing area. (Wilcox owns no interest in this 120 acres).
2. Farmout Agreement, as amended, dated November 2, 1959.

Net Interest:

1. On Oil Production .0205078 ORI
2. In gas spacing pool .01171875 ORI

**PRODUCING LEASES
HARPER COUNTY, OKLAHOMA**

5886 Marvin Price "A"

Oil and Gas lease dated April 26, 1947, from Marvin Price, et ux, Lessor, to J. M. Huber Corporation, Lessee, recorded in Book 12, page 75 covering a $\frac{7}{16}$ interest;

Oil and Gas lease dated April 26, 1947, from Thos. G. Cook, et ux, Lessor to J. M. Huber Corporation, Lessee, recorded in Book 12, page 71, covering a $\frac{1}{32}$ interest;

Oil and Gas lease dated June 11, 1956, from Ernest Hulsey, Lessor, to Carl S. Ford, Lessee, recorded in Book 96, page 69, covering a $\frac{1}{32}$ interest;
160 acres being W/2 SE/4, E/2 SW/4 Section 21-26N-23W

Operated as Marvin Price lease in which Wilcox Oil Company has a .0615230 interest.
Each lease provides for a $\frac{1}{8}$ royalty.

5885 Lydia Palmer

Oil and Gas lease dated April 29, 1947, from David B. Palmer, et ux, Lessor, to J. M. Huber Corporation, Lessee, recorded in Book 12, page 67, covering a $\frac{1}{2}$ interest;

Oil and Gas lease dated June 8, 1956, from John M. McFadden, lessor to Carl S. Ford, Lessee, recorded in Book 96, page 75, covering a $\frac{1}{32}$ interest;

Oil and Gas lease dated June 8, 1956 from John W. Delaney, Lessor, to Carl S. Ford, Lessee, recorded in Book 96, page 72, covering a $\frac{1}{64}$ interest;

Oil and Gas lease dated June 8, 1956 from Central Commercial Company, Lessor, to Carl S. Ford, Lessee, recorded in Book 96, page 78, covering a $\frac{1}{32}$ interest;

Oil and Gas lease dated July 28, 1956, from Anne H. Brinkman, Lessor, to Carl S. Ford, Lessee, recorded in Book 97, page 563, covering a $\frac{1}{32}$ interest;

Oil and Gas lease dated August 17, 1956, from P. C. Mee, Lessor, to Eason Oil Company, Lessee, recorded in Book 97, page 561 covering a $\frac{1}{64}$ interest;
160 acres being NE/4 Section 21-26N-23W

Operated as D. B. Palmer - Eason Oil Company lease, in which Wilcox Oil Company has .0615230 interest. The above two (2) tracts being subject to Joint Operating Agreement dated September 10, 1956, between Eason Oil Company, Operator, and Sunray Mid-Continent Oil Company, et al, Non-Operator, as subsequently amended, which "pools" the Working Interest under Section 21-26N-23W (Wilcox Oil Company's - Price Unit). All interest and contract rights which Wilcox Oil Company owns in the lands covered by said Operating Agreement, and which were created by virtue of Operating Agreement, are included herein. Operating Designations within the Area covered by said Operating Agreement are:

- 6007 1. NW/4 Section 21-26N-23W, Operated as Eldin Campbell - Eason Oil Company lease, in which Wilcox Oil Company has a .061523 interest.
- 6008 2. W/2 SW/4 Section 21-26N-23W, Operated as Earl Campbell - Eason Oil Company lease, in which Wilcox Oil Company has a .061522 interest.

5883 The following Oil and Gas leases:

Lessor	Lessee	Date	Book	Recorded Page	Interest
Earl W. Corn	Carl S. Ford	6- 8-56	96	96	1/32
E. R. Humphrey	Carl S. Ford	6- 8-56	96	99	1/64
Albert Meier	Carl S. Ford	6- 8-56	96	102	1/64
Ben Boepple	Carl S. Ford	6- 8-56	96	105	1/64
Maggie Short	Carl S. Ford	6- 8-56	96	108	1/64
Edwin H. Levy	Carl S. Ford	6- 9-56	96	111	1/64
B. A. Jacobi	Carl S. Ford	6- 9-56	96	114	1/64
Esther M. DeHart	Carl S. Ford	6- 9-56	96	117	1/64
John H. Dorlon	Carl S. Ford	6- 8-56	96	120	11/2400
Wm. Bartels	Carl S. Ford	6- 8-56	96	123	1/300
Enid McDaniels	Carl S. Ford	6-11-56	96	126	1/64
Earl S. Williams	Carl S. Ford	6-11-56	96	129	1/64
W. S. Billings	Carl S. Ford	6- 8-56	96	132	1/32
R. L. Cassingham	Carl S. Ford	6- 8-56	96	135	1/64
G. B. Crawford	W. L. Horton	4-23-47	9	470	1/8

Said leases covering 300 acres being NE/4 Section 17, W/2 NE/4 SE/4, NW/4 SE/4, S/2 SE/4 Section 8-26N-23W

5882 The following Oil and Gas leases:

Lessor	Lessee	Date	Book	Recorded Page	Interest
Rhea Herschberger	Carl S. Ford	6-11-56	96	84	60/1680
Homer L. Johnson	Carl S. Ford	6- 8-56	96	87	30/1680
C. R. Bleckley	Carl S. Ford	6- 9-56	96	90	*
Paul Satz	Carl S. Ford	6- 9-56	96	93	**28/1680
J. E. Osborne	Carl S. Ford	6-11-56	96	81	90/1680
Arthello W. Husted	J. M. Huber Corporation	4-26-47	12	51	60/1680
Harley M. Campbell	J. M. Huber Corporation	4-26-47	12	55	1140/1680
Ruben K. Sparks, Exec.	Carl S. Ford	1- 3-57	102	447	***42/1680

*17/1680 interest in N/2 SW/4, SE/4 SW/4 Section 8, 3/1680 interest in SE/4 NE/4, NE/4 SE/4 Section 7, SW/4 NW/4 Section 8, 45/1680 in NW/4 SE/4 Section 7.

**Only covers N/2 SW/4, SE/4 SW/4 Section 8

***Only covers SE/4 NE/4, NE/4 SE/4 Section 7, SW/4 NW/4 Section 8.

Insofar as said leases cover 280 acres being SE/4 NE/4, N/2 SE/4 Section 7, SW/4 NW/4, N/2 SW/4, SE/4 SW/4 Section 8-26N-23W.

5883A Wilcox lease No. 5883 subject to Operating Agreement dated September 1, 1960, between Eason Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering production of gas and/or gas condensate from the Tonkawa Sand under Section 17-26N-23W, Operated as George B. Crawford Unit, in which Wilcox Oil Company has a .87917 Working Interest.

5882A Wilcox leases No. 5883 and 5882 subject to Operating Agreement dated August 1, 1958, between Eason Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering production from surface to a depth of 7000 feet under Section 8-26N-23W, Operated as Harley Campbell Unit, in which Wilcox Oil Company has a .18434 Working Interest.

5882B Wilcox lease No. 5882 subject to Operating Agreement dated December 20, 1957, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering production of "gas" under Section 7-26N-23W, Operated As Madsen Gas Unit 1-7, in which Wilcox Oil Company has a .04589 Working Interest.

5988 O. A. Cleveland

Oil and Gas lease dated January 16, 1957, from O. A. Cleveland, et ux, Lessor to J. M. Huber Corporation, Lessee, recorded in Book 102, page 647, covering a 1/16 interest (in which Wilcox has a ¼ interest) in the following described land.

80 acres being W/2 NE/4 Section 18-26N-23W

5988A Lease provides for a ¼ royalty and is subject to Operating Agreement dated October 8, 1959, between Taxoma Production, Operator, and Wilcox Oil Company, et al, Non-Operators, covering Section 18-26N-23W, Operated as J. F. Moberly Gas Unit, in which Wilcox Oil Company has a .0019526 Working Interest.

5890 Marvin Price "B"

Oil and Gas lease dated May 1, 1947, from Algy R. Palmer, et ux, Lessors, to J. M. Huber Corporation, Lessee, recorded in Book 12, page 83, covering all interest (in which Wilcox Oil Company has a $\frac{1}{4}$ interest) in the following described land.

160 acres being NW/4 Section 28-26N-28W

Lease provides for a $\frac{1}{8}$ royalty and is subject to Operating Agreement dated February 1, 1957, between Eason Oil Company, Operator, and Wilcox Oil Company, Non-Operators, Operated as Eason Oil Company — Price Palmer lease, in which Wilcox Oil Company has a 25% Working Interest and 21.875% Revenue Interest.

5884 Oil and Gas lease dated June 11, 1956, from J. E. Osborne, Jr., Lessor, and Carl S. Ford, Lessee, covering a $\frac{1}{32}$ interest in the following described land.

240 acres being NW/4, E/2 SW/4 Section 20-26N-23W

Lease provides for a $\frac{1}{8}$ royalty and is subject to Operating Agreement dated August 1, 1957, between C. L. McMahon, Inc., Operator, and Wilcox Oil Company, et al, Non-Operators, covering E/2 SW/4 Section 20-26N-23W, Operated as Forest Oil Corporation — South Bend Lease, in which Wilcox Oil Company has a 1.56625% Working Interest and 1.3672% Revenue Interest

5789 Oil and Gas lease dated December 1, 1953, from Ida M. Jones, Lessor, to George D. Mong, Lessee, recorded in Book 81, page 114, covering all interest (Wilcox Oil Company owns a $\frac{1}{2}$ Working Interest) in the following described land:

160 acres being Lots 1 and 2 (W/2 NW/4) Section 19-26N-23W, E/2 NE/4 Section 24-26N-24W.

Lease provides for a $\frac{1}{8}$ royalty and is subject to a $\frac{1}{16}$ of $\frac{7}{8}$ Overriding Royalty Interest.

5942 Oil and Gas lease dated November 21, 1956, from Diversified Royalty Company of Oklahoma, Lessor, to Eason Oil Company, Lessee, recorded in Book 100, page 420, covering 3.75/79.29 interest (Wilcox Oil Company owns $\frac{1}{2}$ Working Interest) in the following described land:

79.29 acres being Lots 3 and 4 of Section 19-26N-23W

Lease provides for a $\frac{1}{8}$ royalty.

5739A Wilcox Oil Company lease 5739 subject to operating Agreement dated February 12, 1959, between Sunray Mid-Continent Oil Company, Operator and Wilcox Oil Company, et al, Non-Operators, covering Section 24-26N-24W, Operated as E. G. Gonser Unit (as to the Tonkawa Formation) in which Wilcox Oil Company has a $\frac{1}{16}$ Working Interest and a $\frac{1}{16}$ of $\frac{7}{8}$ of $\frac{15}{16}$ Revenue Interest.

5739B Wilcox Oil Company lease 5739 and 5942 are subject to Operating Agreement dated October 9, 1959, between Champlin Oil & Refining Co., Operator, and Wilcox Oil Company, et al, Non-Operators, covering as rights under Section 19-26N-23W, Operated as J. F. Moberly Gas Unit, in which Wilcox Oil Company has 6.48595% Working Interest and a 5.3378% Revenue Interest.

5940 Oil and Gas lease dated November 21, 1956, from Diversified Royalty Company of Oklahoma, Lessor, to Eason Oil Company, Lessee, recorded in Book 100 page 422, covering 3.75/79.49 interest (Wilcox Oil Company owns $\frac{1}{2}$ Working Interest) in the following described land:

79.49 as being Lots 1 and 2 of Section 30-26N-23W

Lease provides for a $\frac{1}{8}$ royalty.

5941 J. E. Gibson "B"

Oil and Gas lease dated November 21, 1956, from Diversified Royalty Company of Oklahoma, Lessor, to Eason Oil Company, Lessee, recorded in Book 100, page 418 covering $\frac{5}{120}$ interest (Wilcox Oil Company owns $\frac{1}{2}$ Working Interest) in the following described land:

120 acres being NE/4 SW/4, N/2 SE/4 Section 30-26N-23W

Lease provides for a $\frac{1}{8}$ royalty

5940A Wilcox Oil Company leases 5940 and 5941 subject to Operating Agreement dated March 1, 1960, between Champlin Oil & Refining Co., Operator, and Wilcox Oil Company, et al, Non-Operators, covering Gas and Gas Condensate produced from the Hoover Sand, as referred to in Oklahoma Commission Order No. 89530 (Cause C. D. No. 11841) dated May 6, 1959, as amended, underlying Section 30-26N-23W, Operated as E. G. Gonser Gas Unit, in which Wilcox Oil Company has .68441% Working Interest and .5989% Net Revenue Interest.

Wilcox Oil Company leases 5940 and 5941 subject to Operating Agreement dated March 1, 1960, between Champlin Oil & Refining Co., Operator, and Wilcox Oil Company, et al, Non-Operators, covering production from Tonkawa Sand Formation, underlying Lot 4, SE/4 SW/4, SW/4 SE/4 Section 19, Lots 1, 2, E/2 NW/4, W/2 NE/4 Section 30-26N-23W, Operated as E. G. Gonser Gas Unit (Tonkawa) in which Wilcox Oil Company has a .78099% Working Interest and a .6834% Revenue Interest.

5941A Wilcox Oil Company lease 5941 subject to Operating Agreement dated November 1, 1959, between An-Son Petroleum Corporation Operator, and Wilcox Oil Company, et al, Non-Operators, covering gas and gas condensate produced from Tonkawa Sand formation underlying NW/4 SE/4, E/2 SW/4, Lots 3 and 4 of Section 30-26N-23W, Lot 1, Section 31-26N-23W, Operated as Jackson "B" Unit in which Wilcox Oil Company has .6965% Working Interest and a Net Revenue Interest of .6965% of 87.5%; and is further subject to Declaration of Unit dated January 2, 1962, executed by An-Son Petroleum Corporation, et al, covering the same land.

Wilcox Oil Company lease 5941 also subject to Operating Agreement dated January 24, 1958 between An-Son Petroleum Corporation, Operator, and Wilcox Oil Company, et al, Non-Operators, covering N/2 SE/4, NE/4 SW/4 Section 30-26N-23W, in which Wilcox Oil Company's working interest is 2.083% and Revenue Interest is 1.8229%. NE/4 SE/4 Section 30-26N-23W Operated as An-Son Corporation—Jackson "A" lease; NW/4 SE/4 Section 30-26N-23W Operated as An-Son Petroleum — Jackson "B" lease.

PRODUCING MINERALS HARPER COUNTY, OKLAHOMA

2104 Thomas F. Shea

An undivided $\frac{1}{2}$ interest in the oil, gas and other minerals in and under
160 acres being NW/4 Section 34-26N-26W

2104A Subject to Operating Agreement dated June 16, 1958, between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering Section 33 and Section 34-26N-26W, operated as Robertson Gas Unit 1-34, in which Wilcox Oil Company has a 9.85% net revenue interest.

This interest is further subject to "Declaration of Pool" Dated June 16, 1958, pertaining to production from the Morrow, the Hoover, the Chester and the Tonkawa formations underlying the same lands, executed by Shell Oil Company, et al.

This interest also subject to "Deferred Gas Production Agreement" dated the _____ day of _____ 1959, between Superior Oil Company, et al.

2222 Guy Thomas

An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
320 acres being SE/4 Section 1, N/2 NE/4 Section 12-28N-26W, Lots 6 and 7 of Section 6-28N-25W

2222A Subject to Operating Agreement dated May 31, 1961, between Blackwell Zinc Company, Inc., Operator, and Wilcox Oil Company, et al, Non-Operators, covering Section 12-28N-26W, operated as Rader Unit in which Wilcox Oil Company has a 3.125% interest.

2141 James M. Crissup:

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
160 acres being SW/4 NW/4, W/2 SW/4 Section 2-25N-22W, NW/4 NW/4 Section 11-25N-22W

2141A Subject to Operating Agreement dated February 28, 1962, between H. F. Sears, Operator, and Wilcox Oil Company, Non-Operators, covering Section 2-25N-22W, operated as Cooper Unit, in which Wilcox Oil Company has a 9.375% interest.

2275 Guy Thomas No. 2

an undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
320 acres being Lots 1, 2 and 3 and S/2 NE/4, S/2 NW/4 Section 1; and SE/4 NE/4 Section 2, all in 28N-26W

Subject to Oil and Gas lease dated December 6, 1963, between Wilcox Oil Company, as Lessor, and The Headington Company, as Lessee, covering Lots 1, 2, 3 and S/2 NE/4 and S/2 NW/4 and SE/4 Section 1-28N-26W.

PRODUCING LEASES HUGHES COUNTY, OKLAHOMA

4576 Martha Thompson

Oil and Gas Mining Lease, dated November 14, 1949, by and between Martha Thompson, a single woman, as Lessor, and Wilcox Oil Company, as Lessee, recorded in Book 150 misc., page 571, insofar as said lease covers an undivided $\frac{1}{4}$ interest in
40 acres being NE/4 SE/4 Section 16-8N-11E

5669 Alonzo Perry

Oil and Gas lease, dated September 12, 1955, by and between Alonzo Perry et ux, as Lessor, and Harry H. Diamond, Inc., as Lessee, recorded in Book 243 misc., page 173, insofar as said lease covers an undivided $\frac{1}{4}$ interest in
120 acres being all of the W/2 SE/4 and SE/4 SE/4 Section 16-8N-11E

The above described Oil and Gas leases each provide for $\frac{1}{4}$ royalty and are subject to that certain Operating Agreement, dated July 12, 1956, by and between Earlsboro Oil and Gas Co., Inc., Operator, and Wilcox Oil Company, as Non-Operator, covering all of SE/4 Section 16-8N-11E, in which Wilcox owns a $\frac{1}{4}$ W. I. and 0.21875 net revenue interest.

EXHIBIT A-1 — Page 17

**PRODUCING LEASES
LINCOLN COUNTY, OKLAHOMA**

- 2926 A. W. Lycan
All interest in and to Oil and Gas lease dated November 12, 1937, from A. W. Lycan, Attorney-in-fact, as Lessor, to Floyd G. Hubbell, as lessee, recorded in Book 111, page 125 covering
160 acres, SW/4 Section 11-14N-6E
Said lease provides for $\frac{1}{8}$ royalty
- 1096 Sac & Fox
All interest in and to Oil and Gas lease dated April 26, 1935, from Sac & Fox Business Committee of Oklahoma, as Lessor, to Wilcox Oil and Gas Company, as lessee, recorded in Book 106, page 469, covering
720 acres, SE/4, Section 21; N/2 SW/4, NW/4, NW/4 NE/4, Section 22; SW/4, S/2 NW/4, Section 15; SE/4 SE/4, Section 16-14N-6E
Said lease provides for $\frac{1}{8}$ royalty
- 2789 H. F. DeLozier
All interest in and to Oil and Gas lease dated June 16, 1936, from H. F. DeLozier, et ux, as Lessor, to H. F. Wilcox Oil and Gas Company, as lessee, recorded in Book 109, page 33, covering
160 acres, S/2 SW/4, Section 10; N/2 NW/4, Section 15-14N-6E
Said lease provides for $\frac{1}{8}$ royalty.
- 2793 H. M. Fitch
All interest in and to oil and gas lease dated January 5, 1935, from H. M. Fitch, et al, as Lessor, to B. B. Blair, as Lessee, recorded in Book 104, page 189, covering
80 acres N/2 NE/4 Section 15-14N-6E
Said lease provides for $\frac{1}{8}$ royalty
- 2794 Lucy Saylor
All interest in and to Oil and Gas lease dated January 9, 1935, from Lucy Saylor, as Lessor, to B. B. Blair, as Lessee, recorded in Book 104, page 246, covering
160 acres NW/4 Section 14-14N-6E
Said lease provides for $\frac{1}{8}$ royalty.
- 3083 Charles Terry #1
All interest in and to Oil and Gas lease dated December 8, 1936, from Charles Terry, et ux, as Lessor, to A. G. Thompson, et al, as Lessee, recorded in Book 109, page 432, covering
40 acres being, SE/4 SE/4 Section 9-14N-6E
Said lease provides for $\frac{1}{8}$ royalty subject to:
1. An overriding royalty of $\frac{1}{8}$.
- 3031 State School Land North #14
All interest in and to oil and gas lease dated February 14, 1938, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 112, page 639, covering
80 acres W/2 NE/4 Section 16-14N-6E
Said lease provides for $\frac{1}{8}$ royalty.
- 3077 School Land #15 South
All interest in and to Oil and Gas lease dated May 16, 1938, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil & Gas Company, as Lessee, recorded in Book 113, page 200 covering
80 acres in the W/2 SE/4 Section 16-14N-6E
Said lease provides for $\frac{1}{8}$ royalty.
- 3078 School Land "A" #16
All interest in and to Oil and Gas lease dated May 16, 1938, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil and Gas Company, Lessee, recorded in Book 113, page 197 covering
80 acres E/2 SW/4, Section 16-14N-6E
Said lease provides for $\frac{1}{8}$ royalty.
- 3103 School Land #16
All interest in and to Oil and Gas lease dated April 10, 1939, from State of Oklahoma, as Lessor, to H. F. Wilcox Oil and Gas Company, as Lessee, recorded in Book 115, page 535, covering
80 acres W/2 SW/4 Section 16-14N-6E

EXHIBIT A-1 — Page 18

- 2925 A. A. Furry
All interest in and to Oil and Gas lease dated April 27, 1935, from A. A. (Americus) Furry, as Lessor, to Ross Oil Company, as Lessee, recorded in Book 104, page 278, covering
80 acres N/2 NE/4, Section 21-14N-6E
Said lease provides for $\frac{1}{8}$ royalty
- 8158 The Evans Co. #3 "B"
All interest in and to Oil and Gas lease dated August 13, 1934, from Evans Brothers Land Company, as Lessor to Sinclair Prairie Oil Company, as Lessee, recorded in Book 104, page 326, covering
40 acres NE/4 NW/4 Section 21-14N-6E
Said lease provides for $\frac{1}{8}$ royalty subject to:
1. An overriding royalty of 1/16 of 7/8
- 2981 The Evans Co. #1
All interest in and to Oil and Gas lease dated January 1, 1938, from the Evans Company, as Lessor, to Floyd T. Hubbell, as Lessee, recorded in Book 111, page 182, covering
120 acres, W/2 NW/4 and SE/4 NW/4 Section 21-14N-6E
Said lease provides for $\frac{1}{8}$ Royalty
- 3715 H. M. Fitch #2
All interest in and to Oil and Gas lease dated January 5, 1935, from H. M. Fitch, et al, as Lessor, to B. B. Blair, as Lessee, recorded in Book 104, page 189, insofar as said lease covers
80 acres being S/2 NE/4 Section 15-14N-6E
Said lease provides for $\frac{1}{8}$ royalty.
- 4531 Sac & Fox "B"
All interest in and to Oil and Gas lease dated March 9, 1949 from Sac & Fox Tribal Business Committee (Lease No. 1-51-Ind-48131) as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book _____, page _____, covering
40 acres being NE/4 SE/4 Section 16-14N-6E
Said lease provides for $\frac{1}{8}$ royalty.
- 4716 May
All interest in and to Oil and Gas lease dated March 31, 1937, from S. B. W. May, et al, as Lessor, to O. J. McCann, as Lessee, recorded in Book 108, page 173, insofar as said lease covers:
80 acres being S/2 SE/4 Section 10-14N-6E
Said lease provides for $\frac{1}{8}$ royalty subject to:
1. An overriding royalty of 1/10 of 7/8 until a total of \$40,000.00 has been paid.
- 5265 C. L. Kenworthy
All interest in and to Oil and Gas lease dated December 3, 1932, from Chester L. Kenworthy, as Lessor, to The Texas Company, as Lessee, recorded in Book 97, page 488, insofar as said lease covers
30 acres, N/2 NW/4 SW/4, SW/4 NW/4 SW/4, Section 14-14N-6E
Said lease provides for $\frac{1}{8}$ royalty subject to:
1. An overriding royalty of $\frac{1}{8}$ of $\frac{1}{8}$

The above leases numbered 2926, 1096, 2789, 2793, 2794, 3083, 3031, 3077, 3078, 3103, 2925, 8158, 2981, 3715, 4531, 4716, 5265 are subject to Plan of Unitization for the Prue Sand Formation of the Sac-Fox Pool dated October 31, 1951, between Wilcox Oil Company, as Operator, and Sinclair Oil & Gas Company, et al, as Non-Operator, covering S/2 SE/4 NE/4, N/2 NE/4 SE/4, SE/4 NE/4 SE/4, E/2 SE/4 SE/4, SW/4 SE/4 SE/4, Section 9; S/2 S/2 NW/4, SW/4 SW/4 NE/4, SW/4, W/2 NW/4 SE/4, S/2 S/2 SE/4, NE/4 SE/4, SE/4, NW/4 SW/4 SE/4 and SE $\frac{1}{2}$ of NE/4 SW/4 SE/4 Section 10; W/2 SW/4 SW/4, Section 11; W/2 W/2 NW/4, W/2 NW/4 SW/4, NE/4 NW/4 SW/4, Section 14; NE/4, W/2, N/2 NE/4 SE/4, W/2 SW/4 SE/4, NW/4 SE/4, less SE/4 SE/4 thereof, Section 15; E/2 NE/4, E/2 NW/4 NE/4, SW/4 NE/4, less NW/4 NW/4 thereof, SE/4, NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SE/4 SW/4 SW/4 Section 16; NE/4 NW/4 NW/4, N/2 NE/4 NW/4, N/2 N/2 NE/4, SE/4 NW/4 NE/4, Section 21; N/2 NW/4 NW/4, SE/4 NW/4 NW/4, and $\frac{1}{2}$ of NW/4 NE/4 NW/4, Section 22-14N-6E, insofar as lands covered thereby are contained within the boundary of said unit. Wilcox Oil Company owns a 77.4054908% Gross interest.
Net Revenue Interest in said unit is 68.49179%.

Lease #1096 is subject to Plan of Unitization of Southeast Sac and Fox Prue Sand Unit dated October 31, 1955, between Sterling Oil of Oklahoma, as Operator, and Wilcox Oil Company, et al, as Non-Operators, covering SE/4 SE/4 NW/4 SE/4, E/2 SW/4 SE/4, S/2 NE/4 SE/4, SE/4 SE/4 Section 15; SE/4 NW/4 SW/4, SW/4 SW/4, W/2 SE/4 SW/4, SE/4 SW/4 SW/4, SW/4 SW/4 SE/4 Section 14; NW/4 NE/4, NW/4 SW/4 NE/4, NW/4 NE/4 NW/4 SW/4, N/2 NE/4 of SW/4, Section 23; N/2 NE/4, N/2 S/2 NE/4, SE/4 SE/4 NE/4 Section 22-14N-6E, insofar as lands covered thereby are contained within the boundary of said Unit. Wilcox Oil Company owns a 6.04321% W. I.

Net interest in production in said Unit is 5.28781%

Lease No. 2926, above, insofar as same covers the E/2 E/2 SW/4 Section 11-14N-6E, and Lease 2794 insofar as same covers the E/2 NE/4 NW/4 Section 14-14N-6E, are subject to Plan of Unitization of the Stroud Prue Unit, dated November 31, 1953, created pursuant to authority of title 52, Oklahoma Statutes 1951, Sections 287.1 to 287.15, between Sunray Mid-Continent Oil Company, as Operator, and Wilcox Oil Company, et al, as Non-Operator, covering lands described therein and in which Wilcox Oil Company owns a 3.5083% W. I., due to interest in Tracts 26 and 28 as shown as Exhibit "A" attached thereto.

Net interest in production in said Unit is 3.06976%

4807 Flora Pickett

All interest in and to Oil and Gas lease dated January 22, 1951, from Flora A. Pickett, as Lessor, to Jess Powell, as Lessee, recorded in Book 174, page 437, insofar as said lease covers 80 acres being S/2 NW/4 Section 21-15N-3E

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. Operating Agreement dated April 30, 1956 between Davidor & Davidor, as Operator, and Wilcox Oil Company as Lessee, covering NW/4 Section 21-15N-3E, in which Wilcox Oil Company owns 50.0000% W. I.

Net interest in production in said unit is 43.7500%

6587 Wesley Phipps

An undivided $\frac{1}{8}$ of 687/1056 of 59/64 of 8/8 interest in and to oil and gas lease dated November 21, 1952, from Wesley A. Phipps, et ux, as Lessor, to S. B. Logan, as Lessee, recorded in Book 232, page 292, insofar as said lease covers

NW/4 SW/4, W/2 NE/4 SW/4, W/2 SW/4 SW/4 Section 22-15N-3E

Wilcox Oil Company interest in this lease is limited to the Skinner sand formation only.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. Lease 4807 and 6587 above are subject to Plan of Unitization, Southwest Mount Vernon Skinner Sand Unit, effective September 1, 1961, between Sunset International Petroleum Corporation, as Operator, and Anchor Production Company, et al, as Non-Operator, covering E/2 SE/4 Section 17; S/2, E/2 SE/4 NE/4, Section 16; SW/4 NW/4, SW/4, Section 15; NE/4 NE/4, E/2 SE/4 NE/4, Section 20; Section 21, less W/2 SW/4 SW/4; NW/4, W 3/4 N/2 SW/4, W/2 SW/4 SW/4, Section 22; NE/4 NW/4, N 3/4 NE/4, Section 28-15N-3E, in which Wilcox Oil Company owns 7.0938% W. I.

Net interest in production in said unit is 6.2070%

5826 L. C. Ritts

All interest in and to Oil and Gas lease dated January 30, 1958, from L. C. Ritts, et ux, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 281, covering an undivided $\frac{1}{4}$ interest in 80 acres being S/2 SW/4 Section 22-14N-6E

All interest in and to Oil and Gas lease dated January 30, 1953, from H. C. Ponder, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 283, covering an undivided $\frac{1}{4}$ interest in 80 acres being S/2 SW/4 Section 22-14N-6E

All interest in and to Oil and Gas lease dated February 3, 1953, from Will Zazondil, et ux as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 285, covering an undivided $\frac{1}{8}$ interest in 80 acres being S/2 SW/4 Section 22-14N-6E

All interest in and to Oil and Gas lease dated February 3, 1953, from Zula Kilpatrick, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 228, page 287, covering an undivided $\frac{1}{8}$ interest in 80 acres being S/2 SW/4 Section 22-14N-6E

Wilcox net interest in Production: $\frac{1}{8}$ of $\frac{1}{8}$ W. I.

**PRODUCING MINERALS
LINCOLN COUNTY, OKLAHOMA**

- 2793 H. M. Fitch
An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
160 acres being NE/4 Section 15-14N-6E
- 2981 The Evans Co. #1
An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
240 acres being NW/4, N/2 SW/4 Section 21-14N-6E
The above mineral interests numbered 2793 and 2981 are subject to Plan of Unitization for the Prue
Sand Formation of the Sac-Fox Pool dated October 31, 1951, between Wilcox Oil Company, as
Operator, and Sinclair Oil & Gas Company, et al, as Non-Operator, covering S/2 SE/4 NE/4, N/2
NE/4 SE/4, SE/4 NE/4 SE/4, E/2 SE/4 SE/4, SW/4 SE/4 SE/4, Section 9; S/2 S/2 NW/4,
SW/4 SW/4 NE/4, SW/4, W/2 NW/4 SE/4, S/2 S/2 SE/4, NE/4 SE/4, SE/4, NW/4 SW/4 SE/4
and $\frac{1}{2}$ of NE/4 SW/4 SE/4 thereof, Section 10; W/2 SW/4 SW/4, Section 11; W/2 W/2 NW/4,
W/2 NW/4 SW/4, NE/4 NW/4 SW/4, Section 14; NE/4, W/2, N/2 NE/4 SE/4, W/2 SW/4 SE/4,
NW/4 SE/4, less SE/4 SE/4 thereof, Section 15; E/2 NE/4, E/2 NW/4 NE/4, SW/4 NE/4, less
NW/4 NW/4 thereof, SE/4, NE/4 SE/4 SW/4, S/2 SE/4 SW/4, SE/4 SW/4 SW/4 Section 16;
NE/4 NW/4 NW/4, N/2 NE/4 NW/4, N/2 N/2 NE/4, SE/4 NW/4 NE/4, Section 21; N/2 NW/4
NW/4, SE/4 NW/4 NW/4, and $\frac{1}{2}$ of NW/4 NE/4 NW/4, Section 22-14N-6E, insofar as lands
covered thereby are contained within the boundary of said unit. Wilcox Oil Company owns a
77.4054908% Gross Interest in the unit.
Net Revenue Interest in said unit is 68.49179%.
No. 2981 above as to the N/2 SW/4, Section 21-14N-6E, is subject to Joint Operating Agreement
dated November 13, 1953, between The Texas Company, as Operator, and Wilcox Oil Company, as
Non-Operator, covering the N/2 SW/4 Section 21-14N-6E, in which Wilcox Oil Company owns
25.0000% W. I.
Net interest in production is 25.0000% of 8/8.
- 3038 Joe Murphy
An undivided $\frac{1}{16}$ interest in and to the oil, gas and other minerals in and under
80 acres being E/2 SW/4 Section 7-14N-6E
Subject to Oil and Gas lease dated February 28, 1938, from Joseph Murphy, as Lessor, to Floyd G. Hub-
bell, as Lessee, recorded in Book 111, page 231, providing for $\frac{1}{8}$ royalty.
- 3037 Earl F. Renner Royalty
An undivided $\frac{2}{60}$ interest in and to the oil, gas and other minerals in and under
NW/4 NE/4, W/2 SW/4 NE/4 Section 7-14N-6E
And an undivided $\frac{8}{60}$ interest in and to the oil, gas and other minerals in and under the above
described lands.
The above interest are subject to Oil and Gas lease dated January 14, 1961, from Wilcox Oil Company,
as Lessor, to Willard Sowards, as Lessee, recorded in Book _____, page _____, providing for
 $\frac{1}{8}$ royalty.
- 8173 Wilhelm S. Renner
An undivided $\frac{5}{55}$ interest in and to the oil, gas and other minerals in and under
SE/4 NE/4, E/2 SW/4 NE/4 Section 7-14N-6E
Subject to lease dated November 30, 1960, from Wilcox Oil Company, as Lessor, to J. L. Cook, as
Lessee, recorded in Book _____, page _____, providing for $\frac{1}{8}$ royalty.

**PRODUCING OVERRIDING ROYALTY
LINCOLN COUNTY, OKLAHOMA**

- 8175 Thomas W. Renfro
An undivided $\frac{3}{32}$ interest in and to oil, gas and other minerals in and under
NW/4 Section 8-14N-6E
As reserved in Assignment of Oil and Gas Lease dated September 29, 1944, from Wilcox Oil Company,
as Assignor, to Anderson-Prichard Oil Corporation, as Assignee, recorded in Book _____, Page

**PRODUCING LEASES
MAJOR COUNTY, OKLAHOMA**

- 5014 Lester Boatright
Oil and gas Lease dated December 19, 1951 from Lester Boatright and wife Thelma Boatright, Lessors, to U. I. Smith, Lessee, recorded in Book 141, page 110 of the records of Major County, Oklahoma, insofar as said lease covers the following described property:
160 acres being SE/4 Section 14-20N-16W
Lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. Unitization Declaration dated January 18, 1960 creating the Branstetter Unit, unitizing all of Section 14-20N-16W into a 640 acre unit for the production of natural gas and associated condensate.
Wilcox interest in Unit is .250000 of 7/8.
- 6586 Albert Karber
Oil and Gas lease dated April 16, 1963 from Albert Karber and Bernice Karber, Lessors to Harmon and Clay Oil Co., Lessees, recorded in Volume 241, page 226 of the records of Major County, Oklahoma, insofar as said lease covers:
80 acres in E/2 SE/4 Section 21-20N-12W
Lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. Operating Agreement dated June 4, 1963 covering operation of the Doane Unit for the production of natural gas from all of Section 21-20N-12W, Wilcox interest in Unit is .125000 of 7/8

**PRODUCING MINERALS
MAJOR COUNTY, OKLAHOMA**

- 1716 Benjamin Penner Royalty
An undivided $\frac{1}{2}$ mineral interest acquired by Assignment of Deed dated January 19, 1928 from S. D. Reynolds to H. F. Wilcox Oil and Gas Company recorded in Volume 38, page 117 of the records of Major County, Oklahoma, under the following described property:
160 acres being NE/4 Section 21-20N-11W
Said mineral interest is subject to:
1. Operating Agreement dated June 9, 1961 for operation of the Bergman Unit for the production of oil and gas from Section 21-20N-11W.
Wilcox Net interest in Unit is .125000 of 8/8

**PRODUCING LEASES
MUSKOGEE COUNTY, OKLAHOMA**

- 6264 Sarah Flusche
An undivided full interest in and to Oil and Gas lease dated February 15, 1962, from Leo Flusche, et ux, as Lessor, to Wilcox Oil Company, as lessee, recorded in Book 1166, Page 112, insofar as said lease covers:
80 acres being W/2 NE/4 Section 20-14N-17E
Said lease provides for a $\frac{1}{8}$ Royalty and is subject to:
Purchase and Connection Acknowledgment with Rock Island Oil and Refining Company, Inc., dated January 31, 1968.
Net interest in production .875000 W. I.
- 6265 Josephine Flusche
An undivided full interest in and to Oil and Gas lease dated February 15, 1962, from A. H. Flusche and Josephine Flusche, his wife, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Volume 1166, Page 109, insofar as said lease covers:
160 acres being SE/4 SW/ Section 17; E/2 NW/4, SW/4 NW/4 Section 20-14N-17E.
Said lease provides for a $\frac{1}{8}$ Royalty and is subject to:
Purchase Contract with Rock Island Oil and Refining Company Inc.
Net interest in production. 875000 W. I.

**PRODUCING LEASES
NOBLE COUNTY, OKLAHOMA**

5044 Carl Gottschalk

Oil and Gas lease dated January 4, 1952 from Carl Gottschalk, et ux, et al, Lessors to Wilcox Oil Company, Lessee, recorded in Book 34, page 284, records of Noble County, Oklahoma, insofar as said lease covers:

160 acres, more or less, in the SW/4 of Section 17-20N-1E I.M.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
2. Oil purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in production .847656 W.I.

5043 Helen Gottschalk

The following Oil and Gas leases

1. Lease dated January 2, 1952 from Sarah A. L. Swart, a widow, et al, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 282, Noble County, Oklahoma.
 2. Lease dated January 4, 1952 from Carl O. Gottschalk et ux, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 283, Noble County, Oklahoma
- INSOFAR AS SAID LEASES COVER THE FOLLOWING:
- 160 acres, more or less, NE/4 of Section 17-20N-1E I.M.

Said leases provides for a $\frac{1}{8}$ royalty and are subject to:

1. Outstanding overriding royalties in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
2. Purchase Agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in production .847656 W. I.

5045 Arthur Bower

Oil and Gas lease dated January 4, 1952, from Arthur L. Bower, et ux, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 285, of the records of Noble County, Oklahoma, insofar as said lease covers:

80 acres, more or less, in the W/2 of the SE/4 of Section 17-20N-1E I. M.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
2. Purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in production .847656 W. I.

5046 C. G. Bay

Oil and Gas lease dated January 4, 1952 from C. G. Bay, et ux Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 286 of records of Noble County, Oklahoma, insofar as said lease covers:

80 acres, more or less, in the E/2 SE/4 of Section 17-20N-1E I. M.

**PRODUCING LEASES
NOBLE COUNTY, OKLAHOMA**

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
2. Purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox Net interest in Production .847656 W. I.

5047 Helen Wilson

Oil and gas lease dated January 8, 1952 from Helen M. Wilson, et al, Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 287 of the records of Noble County, Oklahoma, insofar as said lease covers:

160 acres, more or less, in the NE/4 of Section 20-20N-1E.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Sale of $\frac{1}{2}$ interest in the W/2 of NE/4 to Tennessee Gas Transmission Company, dated November 6, 1956.
2. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
3. Operating Agreement with Tennessee Gas Transmission Company dated the 1st day of November, 1956.
4. Purchase Agreement with Anderson-Prichard Oil Corporation.

Wilcox net interest in production:

1. West $\frac{1}{2}$ of the NE/4 .410156 W. I.
2. East $\frac{1}{2}$ of the NE/4 .847656 W. I.

EXHIBIT A-1 — Page 23

5042 S. A. L. Swart

Oil and Gas lease dated January 2, 1952 from Sarah A. L. Swart, a widow, et al, Lessors, to Wilcox Oil Company, Lessee, recorded in Volume 34, page 280 of the records of Noble County, Oklahoma, insofar as said lease covers:

160 acres NW/4 of Section 17-20N-1E I. M.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of $\frac{1}{32}$ of $\frac{7}{8}$.
2. Purchase Agreement with Anderson-Prichard Oil Corporation.

Net interest in production .847656.

5870 Leonora Seids

Oil and Gas lease (an undivided $\frac{1}{2}$ interest) dated May 16, 1956 from Leonora M. Seids, et ux, et al, to Tennessee Gas Transmission Company, recorded in Volume 75, page 121, of the records of Noble County, Oklahoma, insofar and only insofar as said lease covers:

80 acres more or less, E/2 NW/4 of Section 20-20N-1E.

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated the 1st day of November, 1956 with Tennessee Gas Transmission Company.
2. Purchase agreement with Anderson-Prichard Oil Corporation.

Wilcox net interest in production .437500 W. I.

PRODUCING LEASES OKLAHOMA COUNTY, OKLAHOMA

2649 H. H. Patton — Short

Oil and Gas lease dated June 30, 1930 from T. R. Husted, Lessor, to H. H. Patton, Lessee, recorded in Volume 13, page 338 of the records of Oklahoma County, Oklahoma, insofar as said lease covers:

2.50 acres being All of Blk 6, Schillings Addition to Oklahoma City, Oklahoma

Said lease is subject to a $\frac{1}{8}$ royalty interest.

Wilcox Net Interest in production .875000.

2654 Patton-Haynes

An undivided .33558 interest in Oil and Gas lease dated June 28, 1930 from W. E. Mosier et al, Lessors, to H. H. Patton, Lessee, recorded in Volume 133, page 56 of the records of Oklahoma County, Oklahoma, insofar as said lease covers:

.043 acres being Lots in Block 7 of the Schillings Addition to Oklahoma City, Oklahoma

Lease provides for a $\frac{1}{8}$ royalty interest.

Wilcox interest in production is .33558 of $\frac{7}{8}$, subject to increase to .362500 of $\frac{7}{8}$ when all outstanding original encumbrances on production are paid.

2665 Morgan-Bisbee

An undivided 80/128 interest in Oil and Gas leases dated March 25, 1932 from E. F. Bisbee, et ux, Lessor, to C. E. Stout and D. Warsaski, Lessees, recorded in Volume 93, page 447 of the records of Oklahoma County, Oklahoma, and from Garrison Coal Company, Lessor to C. E. Stout and D. Warsaski, Lessees recorded in volume 87, page 341 of the records of said County; insofar as said leases cover:

All of Block 3 in Amended Plat of McCornack's Factory Addition to Oklahoma City, Oklahoma, lying in the NW/4 of Section 8-11N-3W
Containing .94 acres more or less.

Said leases are subject to a $\frac{1}{8}$ royalty interest and is subject to:

1. Aggregate overriding royalties of .125000

Wilcox Net interest in production .62500

PRODUCING OVERRIDING ROYALTY OKLAHOMA COUNTY, OKLAHOMA

2661 Jameson-Grimes

An undivided $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty out of Oil and Gas lease dated January 23, 1931, from H. I. Grimes, et al, Lessor, to Joe Engberg, Lessee, recorded in Volume 170, Page 165, insofar as said lease covers:

All of Lots 2 and 3 of Block 1, and all of Blocks 2 and 3 out of the Second Riverside Addition to the City of Oklahoma City, Oklahoma County, Oklahoma, according to the recorded plat thereof.

Net interest in production is .054688 O.R.I.

EXHIBIT A-1 — Page 24

**PRODUCING LEASES
OKMULGEE COUNTY, OKLAHOMA**

- 6153 Bill Thompson "A"
Oil and Gas lease dated October 24, 1958 from Wm. R. Thompson, et al, Lessors, to Wilcox Oil Co., Lessee recorded in Volume 828, page 153 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
160 acres being NE/4 Section 31-15N-11E
Lease provides for a $\frac{1}{8}$ royalty.
Wilcox Net interest in production .875000
- 6152 Bertha Souby
Oil and Gas lease dated June 11, 1958 from Bertha Souby, Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 826, page 350-351 of the records of Okmulgee County, Oklahoma insofar as said lease covers:
280 acres being NE/4, N/2 NW/4 and NW/4 SE/4 Section 32-15N-11E
Lease provides for a $\frac{1}{8}$ royalty.
Wilcox net interest in production .875000
- 6134 Ralph Getzendaner
Oil and Gas lease dated June 1, 1958 from R. F. Harmon and J. F. Quinlan, Lessors to Wilcox Oil Company, Lessee, recorded in Volume 819 at page 255 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
160 acres being SW/4 Section 29-15N-11E
Lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. An outstanding overriding royalty of 1/16 of 7/8 as reflected by instrument of record.
Wilcox net interest in production 15/16 of .875000
- 6132 Joe Barnett
Oil and Gas lease dated June 10, 1924 from Wm. M. Thompson and Lelah Thompson, Lessors, to R. W. Kellough, Lessee, recorded in Volume 1, misc. camera rec. at page 233 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
80 acres being, S/2 SE/4 Section 29-15N-11E
Lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. An outstanding overriding royalty of 1/16 of 7/8 as reflected by instrument of record.
Wilcox Net interest in production 15/16 of .875000
- 6133 Tobe Jefferson
Oil and Gas lease dated July 23, 1918 from Elvira Berry, Lessor to Producer's and Refiners Corp. Lessee, recorded in Volume ML 39, page 586 of the records of Okmulgee County, insofar as said lease covers:
80 acres being, E/2 SE/4 Section 30-15N-11E
Said lease provides for a $\frac{1}{8}$ royalty and is subject to:
1. An outstanding overriding royalty of 1/16 of 7/8 as reflected by instrument of record.
Wilcox net interest in production 15/16 of .875000
- 12 Joe Lewis
Oil and Gas lease dated June 22, 1917 from J. C. Doneghy, Lessor to H. F. Wilcox, Lessee, recorded in Volume M-155, page 231 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
80 acres, SE/4 NW/4 and Lot 2 Section 31-16N-12W
and:
Oil and Gas lease dated January 25, 1919 from J. C. Doneghy, Lessor, to H. F. Wilcox, Lessee, recorded in Volume M186, page 160 of the records of said County insofar as such lease covers:
Being 80 acres NE/4 NW/4 and Lot 1 Section 31-16N-12E
Said leases provides for a $\frac{1}{8}$ royalty.
Wilcox Net interest in production .875000
- 35 Hattie Banks
Oil and Gas lease dated September 23, 1918 from W. M. Thompson, et ux, Lessors to H. F. Wilcox, Lessee, recorded in Volume M-159, page 61 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
160 acres more or less in All the NE/4 of Section 30-15N-11E
Lease provides for a $\frac{1}{8}$ royalty interest.
Wilcox Net interest in production .875000

- 86 Walter Banks
Oil and Gas lease dated December 31, 1919 from Wm. M. Thompson et al, Lessors, to H. F. Wilcox Oil & Gas Co., Lessee, recorded in volume 405, page 621 of the records of Okmulgee County, Oklahoma, insofar as said lease covers:
80 acres being N/2 NW/4 of Section 30-15N-11E
Lease provides for a $\frac{1}{8}$ royalty.
Wilcox Net interest in production .875000

**PRODUCING LEASES
OSAGE COUNTY, OKLAHOMA**

- 3752 Osage #2 — E. Wister
Full interest in Oil Mining Lease No. I68 Ind 17443 dated August 1, 1944 from Osage Tribe of Indians in Oklahoma by Fred Lookout, Principal Chief, Lessors, to H. F. Wilcox Oil and Gas Company, Lessees, insofar as said lease covers:
160 acres, more or less, being Tract 438 (NW/4) Section 15-22N-8E
Said lease provides for a $\frac{1}{6}$ royalty and is subject to:
1. Purchase Agreement with Sunray Mid-Continent Oil Company.
Net interest in production is .833333 W. I.
- 5642 Osage Tribe #74 (Sands)
An undivided $\frac{1}{2}$ interest in Oil Mining Lease No. 14-20-201-977 from Osage Tribe of Indians in Oklahoma, by Paul Pitts, Principal Chief, Lessors to The George Oil Company, Lessee, insofar as said lease covers:
160 acres, more or less, being NW/4 of Section 32-28N-8E I.M.
Said lease provides for a $\frac{1}{6}$ royalty and is subject to:
1. Operating Agreement dated the 15th day of September, 1955 with Hanlon-Boyle, Inc.
2. Oil Purchase Agreement with Sinclair Crude Oil Company.
Wilcox Net interest in production .416687
- 5567 Osage Tribe #63 (Sutherland)
Full interest in Oil Mining Lease #14-20-201-3969 dated _____ day of 1955 from Osage Tribe of Indians in Oklahoma by Paul Pitts, Principal Chief, Lessors to Wilcox Oil Company, Lessee, insofar as said lease covers:
160 acres, more or less, being Tract 70 (SW/4) Section 14-21N-9E
Said lease provides for a $\frac{1}{6}$ royalty and is subject to:
1. Oil Purchase Agreement with Tulsa Crude Oil Purchasing Corporation.
Wilcox Net interest in production: .833333 W.I.

**PRODUCING MINERALS
OSAGE COUNTY, OKLAHOMA**

- 2594 May Henson Royalty
An undivided $\frac{1}{4}$ share in and to an Osage Indian Headright acquired from John L. Dickson by Assignment dated October 30, 1930, said interest being equivalent to an undivided 164 acres interest in the oil and gas and other minerals in the Osage Indian Tribal Lands located in Osage County, Oklahoma.

**PRODUCING LEASES
PAWNEE COUNTY, OKLAHOMA**

- 5272 Edgar Clark
Oil and Gas lease dated July 10, 1953 from Edgar Waite Clark et al, Lessors, to Wilcox Oil Company, Lessees, recorded in Volume 27 A&G, page 137 of the records of Pawnee County, Oklahoma, insofar as said lease covers:
160 acres being S/2 SE/4 and S/2 SW/4 Section 26-21N-8E
Lease provides for $\frac{1}{8}$ royalty.
Wilcox Net interest in production .875000

PRODUCING LEASES PAYNE COUNTY, OKLAHOMA

4741 Edward Gould
Oil and Gas lease dated November 16, 1950 from Edward A. Gould and wife, and Edward A. Gould, Attorney for Kittie Grace Gould, Lessors, and Wilcox Oil Company, Lessees, recorded in Volume 60, page 212 of the records of Payne County, Oklahoma, insofar as said lease covers:
160 acres being NW/4 Section 25-20N-4E

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty interest of $\frac{1}{32}$ of $\frac{7}{8}$ as reflected by instrument of record.

Wilcox Net interest in production $\frac{31}{32}$ of .875000

4818 Ellen Lee
Oil and Gas lease dated May 8, 1951 from Ellen Lee and Sam Lee, Lessors to C. A. Bartholomew, Lessee recorded in Volume 61, page 278 of the records of Payne County, Oklahoma, insofar as said lease covers the following:
160 acres being NW/4 of Section 10-18N-2E

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated August 3, 1951, between Wilcox Oil Company, Amerada Petroleum Corporation and Cities Service Oil Company covering all of Section 10-18N-2E "pooling" working interests in which Wilcox has a .500000 interest. All rights and obligations accruing to Wilcox by virtue of such agreement are included herein. Interests in which Wilcox participates are as follows:

4819 Mary Burris
(1) Oil and Gas lease dated May 7, 1951, from Mary Burris, Lessor, to C. A. Bartholomew, Lessee recorded in Volume 61, page 280 of the records of Payne County, Oklahoma, insofar as said lease covers:
W/2 SW/4 NE/4 of Section 10-18N-2E

Said lease provides for a $\frac{1}{8}$ royalty interest.

4941 S. C. Caldwell
(2) Oil and Gas lease dated July 30, 1948 from Zenas Axtell et al, Lessors, to Cities Service Oil Company, Lessee recorded in Volume 52 of page 510 of the records of Payne County, Oklahoma, insofar as said lease covers:
160 acres being SE/4 Section 10-18N-2E

Said lease provides for a $\frac{1}{8}$ royalty interest.

4820 Sam Lee
The following Oil and Gas leases, insofar as they cover the following lands in Payne County, Oklahoma:
160 acres Being SW/4 Section 3-18N-2E

Lease	Date	Lessor	Lessee	Recordation	Interest
a	5-3-51	Sam Lee, et ux	C. A. Bartholomew	Vol 61, page 282	$\frac{1}{4}$
b	5-3-51	W. H. Hall, et ux	C. A. Bartholomew	Vol 61, page 286	$\frac{7}{32}$
c	5-3-51	Carl Wetzal, et ux	C. A. Bartholomew	Vol 61, page 284	$\frac{1}{2}$
d	5-3-51	T. F. Sittou	C. A. Bartholomew	Vol 61, page 288	$\frac{1}{32}$

Said leases provide for a $\frac{1}{8}$ royalty interest.

Wilcox net interest in production .875000

PRODUCING LEASES POTTAWATOMIE COUNTY, OKLAHOMA

970 J. K. Warren
Oil and Gas lease dated October 27, 1923, from J. K. Warren, et al, Lessor, to J. C. Cooke Oil & Gas Company, Lessee, recorded in Book 10, page 366, covering all interest in
80 acres being N/2 SW/4 Section 23-6N-3E

970-A Lease provides for $\frac{1}{8}$ royalty and is subject to Plan of Unitization, West Asher Wannette Sand Unit, approved by the Corporation Commission of the State of Oklahoma on June 1, 1960, by Order No. 42738, in Cause CD 13645, in which N/2 SW/4 Section 23-6N-3E is designated Tract No. 4, with participation factor of .255886.

EXHIBIT A-1 — Page 27

**PRODUCING MINERALS
POTTAWATOMIE COUNTY, OKLAHOMA**

2598 Dickson Oil Royalty Company

An undivided 1/80 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 NE/4 Section 20-7N-5E

Subject to Oil and Gas leases of record which provide for a 1/8 royalty. Operated as:

1. NE/4 NE/4 — Mary Guinn Lease
2. SE/4 NE/4 — Mary Guinn Lease
3. E/2 SE/4 NE/4 from surface to depth of 4240 feet — Mose Guinn Lease

Wilcox Oil Company has 1/80 of 1/8 net revenue interest.

2600 Dickson Oil Royalty Company

An undivided 3/160 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 NE/4 Section 7-8N-5E

Subject to:

1. Oil and Gas lease dated October 2, 1962 from Wilcox Oil Company, Lessor to J. Harmon Lewis, lessee, recorded in Book 232, page 293, which provides for a 1/8 royalty. In addition to said royalty Wilcox to receive, as bonus, an additional 1/32 of 7/8 of production, proportionately reducable, until Wilcox receives \$100.00 per acre for each royalty acre covered by said lease.
2. Maud Misener-Hunton Unit. See below.

2601 Dickson Oil Royalty Company

An undivided 1/80 interest in and to all the oil, gas and other minerals under: 80 acres being W/2 SE/4 Section 18-8N-5E

Lease subject to:

1. Oil and Gas lease dated January 15, 1924 from E. D. Lindley, et ux, Lessor to John B. McClintock, which provides for a 1/8 royalty.
2. Maud Misener-Hunton Unit. See below

2602 Dickson Oil Royalty Company

An undivided 1/160 interest in and to all the oil, gas and other minerals in and under 80 acres being S/2 NW/4 Section 18-8N-5E

Subject to:

1. Oil and Gas lease dated November 8, 1922, from J. F. Hubbard, Lessor, to A. B. Phillips, Lessee, recorded in Book 10, page 258, provides for a 1/8 royalty.
2. Maud Misener-Hunton Unit. See below

2603 Dickson Oil Royalty Company

An undivided 1/320 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 SE/4 Section 18-8N-5E

Subject to:

1. Oil and Gas lease dated March 5, 1924, from E. D. Lindley, et ux, lessor, to Gypsy Oil Company, Lessee; recorded in Book 48, page 635, provides for a 1/8 royalty.
2. Maud Misener-Hunton Unit. See below

2600-A The Wilcox Oil Company properties shown below are subject to "Plan of Unitization of Maud Misener-Hunton Unit" approved by the Corporation Commission of the State of Oklahoma, February 27, 1963, by Order No. 51168, in Cause C.D. 17886, and all modification and amendments thereto:

File No.	Tract No.	Primary Tract Participation	Secondary Tract Participation
2600	2	.19330%	1.83869%
2601	12	3.18420%	9.72819%
2602	7	7.83029%	7.81501%
2603	13	2.62242%	10.95413%

1570 Harry L. Phillips

An undivided 1/4 interest in and to all the oil, gas and other minerals in and under 80 acres being E/2 SE/4 Section 8-8N-4E

Subject to:

1. Oil and Gas lease dated June 14, 1938, from H. F. Wilcox Oil & Gas Company, Lessor, to Helmerich and Payne, Inc. Lessee, providing for a 1/8 royalty, operated as "Roberts Lease", in which Wilcox has a 1/64 net revenue interest.

EXHIBIT A-1 — Page 28

2599 **Dickson Oil Royalty Company**

An undivided 1/160 interest in and to all the oil, gas and other minerals in and under
80 acres being S/2 NW/4 Section 30-7N-5E

Subject to:

1. Oil and Gas lease dated October 19, 1954, from Wilcox Oil Company, Lessor, to H. E. Reding, lessee, providing for a $\frac{1}{8}$ royalty, operated as "McBride" lease in which Wilcox has 1/160 of 1/8 Net revenue interest.

**PRODUCING MINERALS
SEMINOLE COUNTY, OKLAHOMA**

1569 **Nancy Deer**

An undivided 5/128 interest in and to all the oil, gas and other minerals in and under or which may be produced from

80 acres more or less, being N/2 NW/4 Section 3-9N-6E

As reflected by conveyances dated October 25, 1926, and November 3, 1926, from C. H. Lebow, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, and recorded in Volume 241, Page 56 & 58.

Said interest is subject to:

1. Oil and Gas lease dated January 8, 1924, from G. W. Frazier, et ux, Lessor, to G. E. Rogers, lessee, recorded in Book 154, Page 505,
Said lease provides for a $\frac{1}{8}$ royalty and is now held by Carter Oil Company.

Net interest in production is .004825

2611 **Tommy Wisener**

An undivided 1/32 interest in and to all of the oil, gas and other minerals in and under and that may be produced from

40 acres more or less, being SW/4 NE/4 Section 6-9N-6E.

As reflected by conveyance from Dickson Oil Royalty Company, to H. F. Wilcox Oil and Gas Company, dated October 1, 1930, and recorded in Volume 440, Page 110.

Said interest is subject to:

1. Lease in Favor of Sands Petroleum Company and Burke-Greis Oil Company, dated April 10, 1924, recorded in Volume _____, Page _____

Net interest in production is .003906

2612 **J. M. Smith**

An undivided 1/80 interest in and to all of the oil, gas and other minerals in and under and that may be produced from

80 acres more or less, being W/2 NE/4 Section 5-7N-7E

As reflected by conveyance dated October 1, 1930, from Dickson Oil Royalty Company, Grantor, to H. F. Wilcox Oil and Gas Company, recorded in Book 440, Page 104.

Said interest in production is subject to:

1. Oil and Gas lease dated December 7, 1922, from J. M. Smith, et ux, Lessor to Cosden Oil and Gas Company, recorded in Book 122, Page 466. Said lease provides for a $\frac{1}{8}$ royalty and is now owned by Sunray Mid-Continent Oil Company.

Net interest in production .0015625

2613 **J. D. Shepherd**

An undivided 41/10080 interest in and to all the oil, gas and other minerals in and under, and that may be produced from

37.80 acres more or less being the SW/4 NW/4 Section 6-9N-6E

As reflected by conveyance dated October 1, 1930, from Dickson Oil Royalty Company, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Book _____, Page _____

Said interest is subject to:

1. Oil and Gas lease in favor of Skelly Oil Company.

Net interest in production is .000508

**PRODUCING MINERALS
STEPHENS COUNTY, OKLAHOMA**

- 2617 An undivided $\frac{1}{2}$ interest in and to oil, gas and other minerals in and under
Lots 11, 12, 17, 18, 19, and 20, being SW/4, Section 12-2S-8W.
- 949 E. C. Armstrong
An undivided $\frac{2}{5}$ interest in and to the oil, gas and other minerals in and under
W/2 SE/4 Section 8-2S-6W
- Subject to oil and gas lease dated May 26, 1950, from Wilcox Oil Company, as Lessor, to E. C. Harlin, Jr., as Lessee, recorded in Book _____, Page _____, providing for $\frac{1}{4}$ royalty subject to:
1. Plan of Unitization for Northwest Palacine Yates Sand Unit, between The Atlantic Refining Company, as Operator, and Beard Oil Company, et al, as non-Operator, covering:
NE/4 SE/4 NE/4 Section 7; SE/4 NW/4 NW/4, SW/4 NE/4 NW/4, S/2 NW/4, SW/4 SW/4
NE/4, N/2 NW/4 SW/4, NE/4 SW/4, NE/4 SE/4 SW/4, W/2 SE/4, SW/4 NE/4 SE/4, W/2
SE/4 SE/4 Section 8-2S-6W, in which Wilcox Oil Company owns a R. I. of .017215%.

**PRODUCING OVERRIDING ROYALTY
STEPHENS COUNTY, OKLAHOMA**

- 2616 J. M. Shelton
An undivided 133/6144 interest in and to the oil, gas and other minerals in and under
E/2 W/2 SE/4 Section 32-1S-8W
- Subject to lease dated January 27, 1916, from J. M. Shelton, et ux, as Lessor, to J. H. Ledbetter, as Lessee, recorded in Book 68, page 34, insofar as said lease covers said E/2 W/2 SE/4, Section 32-1S-8W.

**PRODUCING LEASES
TEXAS COUNTY, OKLAHOMA**

- 3880 Lola H. Reust
Oil and Gas lease dated December 12, 1940, from Lola Hockett Reust, et al, lessors, to J. W. McCall, Lessee, recorded in Book 231, page 8, covering the following described land.
- All interest in 80 acres being E/2 SE/4 Section 22-4N-14ECM and 15/16 interest in 80 acres being
W/2 SE/4 Section 22-4N-14ECM.
- Oil and Gas lease dated February 15, 1943, from A. L. Jones, Lessor, to T. B. Roach, Lessee, recorded
in Book 233, page 299, covering a 1/16 interest in the following described land.
- 80 acres being W/2 SE/4 Section 22-4N-14ECM
- 3881 Inter-State Cattle Co.
Oil and Gas lease dated September 19, 1936, from Inter State Cattle Loan Company, Lessor, to Empire
Oil and Refining Company Lessee, recorded in Book 204, page 108, as amended by Instrument dated
December 20, 1940, recorded in Book 219, page 585, covering all interest in the following described land.
- 160 acres being SW/4 Section 22-4N-14ECM
- 3882 F. M. Vivian
Oil and Gas lease dated October 2, 1944, from F. M. Vivian, et ux, Lessors, to Cities Service Gas Com-
pany, Lessee, recorded in Book 255, page 314, covering all interest in the following described land.
- 160 acres being NW/4 Section 22-4N-14ECM
- 3883 Jesse D. Hill
Oil and Gas lease dated November 26, 1943, from Jesse D. Hill et ux, Lessors, to Cities Service Oil Com-
pany, Lessee, recorded in Book 243, page 271, covering all interest in the following described land.
- 160 acres being NE/4 Section 22-4N-14ECM
- Wilcox Oil Company owns a $\frac{1}{4}$ working interest in each of the above leases, all of which provide for a
 $\frac{1}{8}$ royalty, and all of which are subject to "Declaration for Unitized Operations", dated January 19,
1945, covering oil and gas produced from Section 22-4N-14E; said leases being further subject to "Agree-
ment" dated February 7, 1945, between Cities Service Gas Company and Wilcox Oil Company, et al,
providing for the operations of said Section 22, which is operated as Reust Unit in which Wilcox Oil
Company has a $\frac{1}{4}$ working interest and a $\frac{1}{4}$ of $\frac{1}{8}$ Revenue interest.

**PRODUCING MINERALS
WASHITA COUNTY, OKLAHOMA**

- 1990 Floyd O. Howarth
An undivided $\frac{1}{2}$ interest in all the oil, gas and other minerals in and under
200 acres being S/2 NW/4, W/2 NE/4, NE/4 NE/4 Section 19-10N-20W
- Subject to "Elk City Hoxbar Sand Conglomerate Unit", approved by the Corporation Commission of The
State of Oklahoma, October 27, 1950, in Cause C.D. No. 2846, Order 24158, as subsequently enlarged,
the participating factor for this acreage being .009852248.

EXHIBIT A-1 — Page 30

**PRODUCING LEASES
WOODS COUNTY, OKLAHOMA**

5631 Doris Steffens

Oil and Gas lease dated July 18, 1955, as amended December 7, 1962, from Doris Magney Steffens, et vir, Lessor, to Wilcox Oil Company, Lessee, recorded in Volume 151, page 189, and amendment recorded in Volume 221, page 359, insofar as said lease covers:

160 acres more or less, being SE/4 Section 20-27N-15W

Said lease provides for a $\frac{1}{4}$ royalty and is subject to:

1. Operating Agreement dated January 23, 1963 by and between The Atlantic Refining Company, as Operator, and Wilcox Oil Company, as Non-Operator, covering all of Section 20-27N-15W, containing 640 acres, more or less.
2. Oklahoma Corporation Commission Order No. 50564, dated December 14, 1962, unitizing all of Section 20-27N-15W, containing 640 acres more or less, for the production of gas and gas condensate from the Tonkawa Sand. (The Marcum Gas Unit).

Wilcox Net revenue interest: .218750

**PRODUCING MINERALS
WOODWARD COUNTY, OKLAHOMA**

2129 W. F. Hawk, et ux

An undivided $\frac{1}{4}$ interest in all the oil, gas and other minerals in and under

160 acres being E/2 SE/4 Section 9, NW/4 SW/4 Section 10, NW/4 NW/4 Section 15-23N-18W

2129-A Subject to "Communitization Agreement" dated November 25, 1963, executed by Tenneco Oil Company, et al, recorded in Book 208, page 534, which communitizes gas and gas condensate produced from the Chester Lime Formation under Section 10-23N-18W, and is further subject to "Operating Agreement" dated May 17, 1963, between Tenneco Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering said Section 10 from surface to base of Chester Limestone Formation, Operated as "Essie Hensley Unit", in which Wilcox Oil Company has a .08125 interest.

**PRODUCING MINERALS
OUACHITA COUNTY, ARKANSAS**

2635 Henry Primm

An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in and under

50 acres being West $\frac{1}{4}$ of the SW/4 SW/4 Section 24-15S-16W; All that part of SE/4 SE/4 Section 23-15S-16W lying on East side of a certain Spring Branch which runs North and South and dividing said tract of land about the center thereof and containing 20 acres more or less.

Said interest is subject to:

1. (a.) Oil and Gas lease dated August 7, 1928, from C. H. Speights, et al, Lessor, to Little Fay Oil Company, Lessee, recorded in Book 62, Page 136.
(b.) Oil and Gas lease dated March 19, 1928, from H. P. Primm, et ux, Lessor, to Little Fay Oil Company, Lessee, recorded in Book 75, Page 627.
2. Unitization Agreement dated April 29, 1960, between Wilcox Oil Company, et al, non-Operators, and Kerr-McGee Oil Industries, Inc., Operator, recorded in Book _____, Page _____, insofar as said unit covers 10 acres more or less being SE/4 SW/4 SW/4 Section 24-15S-16W.

Net interest in production:

- | | |
|----------------------|----------|
| 1. Non-Unitized area | .0156250 |
| 2. Unitized area | .0078125 |

2636 Hezekiah H. Goodwin

An undivided $\frac{1}{4}$ interest in and to all oil, gas and other minerals in and under

40 acres being SW/4 SE/4 Section 29-15S-15W, as reflected by conveyance dated October 1, 1930, from John L. Dickson, et ux, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Book 85, Page 564.

Said interest is subject to:

1. Oil and Gas lease in favor of Ohio Oil Company.

Net interest in production is .0156250.

EXHIBIT A-1 — Page 31

**PRODUCING LEASES
BARBER COUNTY, KANSAS**

5657 Caleb Forsyth "A"

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 16, 1946, from Caleb J. Forsyth, et ux, as Lessor, to Magnolia Petroleum Company, as Lessee, recorded in Book 41, Page 623, covering:
80 acres being S/2 SW/4 Section 17-32S-12W

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{1}{16}$ of $\frac{7}{8}$.
2. Operating Agreement dated May 6, 1958, between Pickrell Drilling Company, as Operator, and Magnolia Petroleum Company, as non-Operator, covering S/2 SW/4 Section 17-32S-12W, in which Wilcox Oil Company owns 25.0000% W. I.

Net interest in production in said unit 20.50781%.

5658 Caleb Forsyth "B"

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 16, 1946, from Caleb J. Forsyth, et ux, as Lessor, and Magnolia Petroleum Company, as Lessee, recorded in Book 42, Page 51, insofar as said lease covers:

80 acres being E/2 NW/4 Section 17-32S-12W

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{1}{16}$ of $\frac{7}{8}$.
2. Operating Agreement dated May 6, 1958, between Pickrell Drilling Company, as Operator, and Magnolia Petroleum Company, as non-Operator, covering E/2 NW/4, SW/4 NW/4, NE/4 SW/4, Section 17-32S-12W, in which Wilcox Oil Company owns 12.5000% W. I.

Net interest in production in said unit is 10.253906%.

**PRODUCING LEASES
DECATUR COUNTY, KANSAS**

6343 Anna Miller "A"

Oil and Gas lease dated April 28, 1961, from Anna G. Miller, Lessor, to Rains & Williamson Oil Co., Lessee, recorded in Book 31, page 149, covering all interest in the following described land.
160 acres being SW/4 Section 12-2S-28W

Lease provides for $\frac{1}{8}$ royalty.

Wilcox Oil Company owns a $\frac{1}{4}$ Working Interest.

Lease Subject to:

1. A $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty.
2. Operating Agreement dated March 22, 1962, between Murfin Drilling Company, Operator, and Wilcox Oil Company, et al, Non-Operators.

6412 Robert Barratt

Oil and Gas lease dated December 5, 1952 from Robert O. Barratt, et ux, Lessor, to Pack Oil Company, Lessee, recorded in Book 23, page 25, covering all interest in the following described land.
200 acres being E/2 NE/4, NE/4 NW/4, W/2 SE/4 Section 14-2S-28W

Lease provides for $\frac{1}{8}$ royalty.

Wilcox Oil Company owns $\frac{1}{4}$ working interest.

Lease subject to:

1. $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty.
2. Operating Agreement dated June 12, 1962, between Murfin Drilling Company, Operator, and Wilcox Oil Company, et al, Non-Operators.

6418 Fred Unger

Oil and Gas lease dated March 21, 1955, from Fred H. Unger et ux, Lessor, to Anderson Prichard Oil Corporation, Lessee, recorded in Book 25, page 450, covering all interest in the following described land.
160 acres being SE/4 Section 25-2S-30W

Lease provides for a $\frac{1}{8}$ royalty.

Wilcox Oil Company owns $\frac{1}{4}$ working interest.

Lease Subject to:

1. $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty.
2. Operating Agreement dated October 1, 1962, between Rains & Williamson Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operators.

**PRODUCING LEASES
HODGEMAN COUNTY, KANSAS**

5737 Ray Lee

Oil and Gas lease dated April 19, 1956, from Ray Lee, et ux, Lessor to Rains & Williamson Oil Company, Lessee, recorded in Book 10, Page 524, covering all interest in the following described land:
320 acres being S/2 Section 16-22S-22W

Lease provides for $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated July 23, 1962, between Sunray DX Oil Company, Operator, and Wilcox Oil Company, non-Operator, which "pools" the Working Interest in S/2 Section 16 and N/2 Section 21-22S-22W, operated as Edwin Miller Unit and which Wilcox Oil Company has a $\frac{1}{2}$ Working Interest and a $\frac{1}{2}$ of $\frac{1}{8}$ Revenue Interest. All rights and obligations which accrue to Wilcox Oil Company by virtue of said Agreement are included herein. Lease operating designations covered by this agreement are:

5737-A S/2 Section 16-22S-22W, operated as Ray Lee lease.

5737-B NE/4 Section 21-22S-22W, operated as E. Miller Unit.

5737-C E/2 NW/4 Section 21-22S-22W, operated as Emma Lingenfelder lease.

5737-D W/2 NW/4 Section 21-22S-22W, operated as A. Miller Unit.

6572 Maud Armstrong

Oil and Gas lease dated September 19, 1956, from Maud Armstrong, et al, Lessor, to C. N. Bidwell, Lessee, recorded in Book 11, Page 403, covering all interest in the following lands:
320 acres being NW/4, SE/4 Section 15-22S-23W.

Wilcox Oil Company owns $\frac{1}{4}$ Working Interest.

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated April 8, 1964, between Mull Drilling Company, Inc., Operator, and Wilcox Oil Company, et al, non-Operator, covering SW/4, W/2 NE/4, SE/4 NE/4, N/2 SE/4 Section 16; NW/4 SW/4, SE/4 Section 15; N/2 Section 22; W/2 Section 23-22S-23W. All rights and obligations accruing to Wilcox Oil Company by virtue of said agreement are included herein.

6635 Gladys Scothorn

Oil and Gas lease dated July 3, 1962, from Raleigh Scothorn, et ux, Lessor, to A. E. Stokes, Lessee, recorded in Book 16, Page 54, covering all interest in the following described land:
160 acres being NE/4 Section 22-22S-23W.

Wilcox Oil Company owns $\frac{1}{4}$ Working Interest.

Lease provides for $\frac{1}{8}$ royalty and is subject to:

1. 1/16 of 7/8 overriding royalty on wells producing less than 35 BOPD and 1/8 of 7/8 overriding royalty on wells producing 35 BOPD or more.
2. Agreement dated January 3, 1964, between Northern Natural Gas Producing Company, et al.
3. Operating Agreement dated April 8, 1964, between Mull Drilling Company, Inc., more particularly described in #6572 above.

5736 Mary Kuhn

Oil and Gas lease dated April 20, 1956, from Mary Emma Kuhn, et al, Lessor, to Rains & Williamson Oil Company, Lessee, recorded in Book 10, Page 523, and Correction lease thereto, dated November 2, 1962, from Gladys M. Kuhn, Lessor, to Wilcox Oil Company, Lessee, recorded in Book 17, Page 80, covering all interest in the following described land:
320 acres being N/2 Section 13-22S-22W.

Lease provides for a $\frac{1}{8}$ royalty.

**PRODUCING LEASES
KINGMAN COUNTY, KANSAS**

5678 Wells-Towner

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated May 14, 1953, from Ruth R. Wells, et al, as Lessor, to Harry McAdams, as Lessee, recorded in Book 66, Page 235, insofar as said lease covers:
W/2 NE/4 Section 17-30S-7W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty equal to $\frac{1}{16}$ of $\frac{7}{8}$.

Net interest in production is 20.50781%.

5678 Cora Gilchrist

All interest in and to Oil and Gas lease dated September 1, 1955, from Cora Gilchrist, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 73, Page 209, covering:
SW/4 SW/4 Section 10; NW/4 NE/4, NE/4 NW/4, 5.00 acres out of NW/4 NW/4 described as beginning at SE corner NW/4 NW/4, North 424.5 feet, West 513.0 feet, South 424.5 feet, East 513.0 feet to place of beginning.

Said lease provides for $\frac{1}{8}$ royalty interest.

Net interest in production is 87.5000%.

5674 John Kinert

All interest in and to Oil and Gas lease dated September 1, 1955, from Clark A. Wallace, Executor & Trustee, et al, as Lessor, to Wilcox Oil Company, as Lessee, recorded in Book 73, Page 210, covering:
W/2 SE/4, E/2 SW/4, SW/4 NE/4, SE/4 NW/4, Section 15-30S-7W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. Salt water Disposal Agreement dated April 27, 1961, between Wilcox Oil Company and Mull Drilling Company, Inc.
2. Salt water Disposal Agreement dated September 21, 1960, between Wilcox Oil Company and Pure Oil Company.
3. Salt water Disposal Agreement dated January 2, 1958 between National Cooperative Refining Association and Wilcox Oil Company.
4. Declaration of Unitization, dated June 5, 1963, for unit created by State Corporation Commission of Kansas, Order Docket No. 71,222-C (C-10,-159), dated May 1, 1963, covering:
E/2 W/2, W/2 E/2 Section 15-30S-7W.

Net interest in production is 87.5000%.

5444 Barney DeWeese

All interest in and to Oil and Gas lease dated April 9, 1954, from Barney B. DeWeese, et ux, as Lessor, to A. F. Baker, recorded in Book 68, Page 367, covering:
W/2 SW/4 Section 25; N/2 NE/4, NE/4 NW/4 Section 36-29S-7W.

Said lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 87.5000%.

5435 Joe Krehbiel

All interest in and to Oil and Gas lease dated April 9, 1954, from Joe P. Krehbiel, as Lessor, to A. F. Baker, as Lessee, recorded in Book 68, Page 288, covering:
W/2 NW/4, NW/4 SW/4 Section 36-29S-7W.

Said lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 87.5000%.

6226 E. J. Kohman

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated May 5, 1954, from E. J. Kohman, Gdn., as Lessor, to Elmer M. Oak, as Lessee, recorded in Book 68, Page 91, covering:
NW/4, W/2 NE/4, SW/4, SE/4 Section 8-30S-7W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{3}{32}$ of $\frac{7}{8}$ insofar as said lease covers:
NW/4, W/2 NE/4, SW/4, W/2 SE/4 Section 8-30S-7W.

Net interest in production is 19.824218%.

EXHIBIT A-1 — Page 34

5769 Leo Cox

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated September 26, 1953, from Leo V. Cox, et ux, as Lessor, to Southwest Grease and Oil Company, Inc., as Lessee, recorded in Book 66, Page 437, covering: S/2 Section 19-29S-6W; E/2 SE/4 Section 24-29S-7W.

Said lease provides for $\frac{1}{8}$ royalty.

Net interest in production is 21.8750%.

6402 Maple "G"

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 1, 1953, from J. H. Maple, et ux, as Lessor, to A. F. Baker, as Lessee, recorded in Book 67, Page 489, covering: W/2 NW/4, W/2 NE/4, E/2 SE/4 Section 30-29S-6W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{1}{16}$ of $\frac{7}{8}$.

Net interest in production is 20.50781%.

6297 Jessie Matson

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated July 1, 1961, from Jessie W. Matson, et al, as Lessor, to Elmer M. Oak, as Lessee, recorded in Book 95, Page 70, covering: E/2 W/2 Section 31-29S-6W.

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. An overriding royalty of $\frac{1}{16}$ of $\frac{37}{48}$ of $\frac{7}{8}$.
2. Declaration of Unitization dated January 5, 1962, between Pickrell Drilling Company, Phillips Petroleum Company, Walters Drilling Company and the Pure Oil Company.
3. Operating Agreement dated December 18, 1961, between Pickrell Drilling Company, as Operator, and Phillips Petroleum Company, et al, as non-Operator, covering: W/2 Section 31-29S-6W, in which Wilcox Oil Company owns 12.5000% W. I.

Net interest in production in said lease is 10.41057%.

PRODUCING MINERALS
GREENWOOD COUNTY, KANSAS

2632 Herbert A. Patterson

An undivided $\frac{1}{16}$ interest in and to the Oil, Gas and other minerals in and under SW/4 Section 22-23S-11E

Said above interest subject to:

1. Oil and Gas lease to Phillips Petroleum Company of record providing for $\frac{1}{8}$ royalty.
2. Community Agreement dated February _____, 1940, between Phillips Petroleum Company, et al covering SE/4 SW/4 Section 22-23S-11E.
3. Unitization Agreement dated _____, 1950, between Phillips Petroleum Company, et al, as Lessee, and Wilcox Oil Company, et al, as Royalty owners, covering SW/4 Section 22; SE/4, E/2 SW/4, Section 21; NW/4 Section 27; NE/4 Section 28-23S-11E, in which Wilcox Oil Company owns 0.7046% of $\frac{1}{8}$ R. I.

**PRODUCING LEASES
RENO COUNTY, KANSAS**

2060 F. F. Neufeld

A. Oil and Gas lease dated December 28, 1928 from F. F. Neufeld, et ux, Lessor to Joe Harp, Lessee, recorded in Volume 13, at page 274 of the records of Reno County, Kansas, insofar as said lease covers: 160 acres, more or less, being NW/4 (except railroad right-of-way) Section 12-23S-4W

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Assignment from Wilcox Oil Company to Beaver Oil Corp. of all the interest of Wilcox in the lease as to the N/2 of NW/4; and wherein Wilcox reserved a variable overriding royalty depending on potential (now 1/16 and conveyed herein by part B below)

2060-A 2. Salt Water Disposal Agreement dated July 1, 1963, between Wilcox Oil Company and Drillers Production Company, Inc., all rights and obligations accruing to Wilcox Oil Company by virtue of said agreement are also herein included.

Wilcox net interest in production .875000*

*Note that net interest shown does not reflect certain royalty interests in SE/4 NW/4 and SW/4 NW/4 acquired in due course by Wilcox and conveyed in the portion of this schedule covering royalties and mineral interests (See #2060 in that category)

- B. A 1/16 overriding royalty interest on production from N/2 NW/4 reserved by Wilcox in assignment enumerated in (1) above.

3106 C. V. Montford "C"

Oil and Gas lease dated July 28, 1928 from C. V. Montford and wife, Lessors, to Tidal Oil Company, Lessee, recorded in volume 8, page 189 of the records of Reno County, Kansas, insofar as said lease covers:

10 acres, more or less, being NW/4 NW/4 SW/4, Section 12-23S-4W

Lease provides for a $\frac{1}{8}$ royalty.

Wilcox net interest in production .875000

**PRODUCING MINERALS
RENO COUNTY, KANSAS**

2060 F. F. Neufeld

An undivided 1/320 interest in all oil, gas and other minerals produced from the following described property by virtue of Deed dated July 22, 1949 from J. I. Gallaher, Grantor to Wilcox Oil Company, Grantee, recorded in Volume 36, page 68 of the records of Reno County, Kansas:

40 acres being SW/4 NW/4 Section 12-23S-4W

Wilcox interest acquired thereunder 1/320*

*Note the premises are subject to a lease now held by Wilcox, conveyed under the above #2060 in the portion of this schedule covering leasehold interests.

2060 F. F. Neufeld "A"

An undivided 1/640 interest in all oil, gas and other minerals produced from the following described property, by virtue of Deed dated September 29, 1942 from Lena Cook, Grantor to Wilcox Oil and Gas Company, Grantee, recorded in volume 59, page 521 of the records of Reno County, Kansas.

80 acres being SE/4 NW/4, SW/4 NW/4 Section 12-23S-4W

Wilcox net interest acquired thereunder 1/640*

*Note premises are subject to a lease now held by Wilcox, conveyed under above #2060 in the portion of this schedule covering leasehold interests.

**PRODUCING MINERALS
RUSSELL COUNTY, KANSAS**

1684 C. F. Baldwin

An undivided $\frac{1}{8}$ interest in and to the oil, gas and other minerals in and under SW/4 Section 16-12S-15W

The above interest is subject to:

1. Oil and Gas lease dated July 3, 1958, from Wilcox Oil Company, as Lessor, to V-D-O Oil Company, as Lessee, recorded in Book _____, Page _____, providing for $\frac{1}{8}$ royalty.

EXHIBIT A-1 — Page 36

**PRODUCING LEASES
SEDGWICK COUNTY, KANSAS**

5539 John Hay

An undivided $\frac{1}{2}$ interest in and to oil and gas lease dated October 8, 1954 from John J. Hay, et ux, Lessors, to Southwest Grease and Oil Company, Lessee, recorded in Book M-327, page 415, of the records of Sedgwick County, Kansas, insofar as said lease covers

80 acres, more or less, being N/2 NW/4 of Section 36-28S-1W

Said lease provides for a $\frac{1}{8}$ royalty, and is subject to:

1. Operating Agreement dated February 24, 1955, between Southwest Grease and Oil Company, Inc., et al, and Wilcox Oil Company.

Wilcox Net interest in production .437500

5540 Mary E. Brown

Undivided $\frac{1}{2}$ interest in Oil and Gas lease dated October 20, 1954, from Mary E. Rogers Brown, et vir, Lessors and F. H. Unruh, Lessee, recorded in Book M-328, page 275, of the records of Sedgwick County, Kansas, insofar as said lease covers

80 acres more or less, being S/2 NW/4 of Section 36-28S-1W

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated February 24, 1955 between Southwest Grease and Oil Company, Inc., et al, and Wilcox Oil Company.

Wilcox Net interest in production .437500

5743 Elmer Huffman

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated November 5, 1954 from Elmer E. Huffman et ux, Lessors to Southwest Grease and Oil Company, Inc., Lessee recorded in Volume M-320, page 63, of the records of Sedgwick County, Kansas, insofar as said lease covers.

160 acres being Lots 3 and 4 and the E/2 SW/4 (also described as the SW/4) of Section 18-29S-1E

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty in the amount of 1/16 of 7/8.
2. Gas Purchase Contract with Cities Service Gas Company dated April 14, 1956.
3. Operating Agreement between Shawver-Armour and Wilcox Oil Company.

Wilcox Net interest in production .205078 W. I.

5744 R. M. Jones

Undivided $\frac{1}{2}$ interest in Oil and Gas lease dated February 25, 1956, from Ransom M. Jones, et ux, Lessors, to Shawver Armour, Inc., Lessee, recorded in Book M-365, page 413, of the records of Sedgwick County, Kansas, insofar as said lease covers:

80 acres, more or less, N/2 NW/4 Section 19-29S-1E

Said lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Outstanding overriding royalty of 1/16 of 7/8
2. Gas Purchase Contract with Cities Gas Company, dated April 14, 1956.
3. Operating Agreement between Shawver Armour and Wilcox Oil Company.

Net interest in production .410156 W. I.

**PRODUCING LEASES
SUMNER COUNTY, KANSAS**

6107 Seydell

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated September 10, 1957, from Margaret Seydell and Ernest Seydell, Lessors, to Shawver-Armour, Inc., Lessees, recorded in Volume 6 (photo), Page 376, insofar as said lease covers:

SE/4 Section 17-30S-1E

Lease provides for a 23/128 royalty interest and is subject to:

1. Operating Agreement dated September 1, 1963, between Wilcox Oil Company, Operator, and Sam P. Wallingford, Inc., et al, covering SE/4 Section 17-30S-1E.

Wilcox net interest in production is 25% of 815/384.

6108 Florence Downs

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated May 11, 1955, from Florence E. Downs, et al, as Lessor, to Pack Oil Company, as Lessee, recorded in Book O-55, Page 19, insofar as said lease covers:

S/2 NE/4 Section 20-30S-1E

Lease provides for a $\frac{1}{8}$ royalty and is subject to:

1. Operating Agreement dated September 1, 1963, between Wilcox Oil Company, Operator, and Sam P. Wallingford, Inc., et al, covering S/2 NE/4 Section 20-30S-1E.

Wilcox net interest in production is 25% of .875000.

6142 Elizabeth Costin

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated August 28, 1957, from Elizabeth A. Costin and Anna Costin, Lessors, to B. O. Hollett, Lessee, recorded in Book 6 (photo), Page 211, insofar as said lease covers:

W/2 SE/4 Section 8-30S-1E

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Outstanding overriding royalty of 1/16 of 7/8.
2. Drilling Agreement dated May 21, 1959, between Wilcox Oil Company, Operator, and Southwest Production Company, et al, as to the leased acreage.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16 of 7/8.

6160 Raymond Markley

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated October 8, 1957, from Raymond Markley, et al, Lessor, to Pack Oil Company, Lessee, recorded in Volume 4 (photo), Page 136, insofar as said lease covers:

W/2 SE/4 Section 22-30S-1E.

Lease provides for a $\frac{1}{8}$ royalty interest subject to:

1. Outstanding overriding royalty interest of 1/16 of 7/8.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16.

6183 Richard Waggoner

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated December 9, 1958, from Delvia Waggoner, as Gdn. for R. L. Waggoner, Lessor, to Shawver-Armour, Inc., Lessee, recorded in Volume 23 (photo), Page 180 insofar as said lease covers:

E/2 SE/4 Section 22-30S-1E.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Outstanding overriding royalty interest of 1/16 of 7/8.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16 of 7/8.

6189 William Bailey

An undivided $\frac{1}{4}$ interest in and to Oil and Gas lease dated September 23, 1953, from Theta Bailey, et vir, Lessor, to Magnolia Petroleum Company, Lessee, recorded in Volume 38, Page 245 of the records of Sumner County, Kansas, insofar as said lease covers:

SW/4 Section 23-30S-1E.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Outstanding overriding royalty of 1/16 of 7/8.

Wilcox net interest in production is $\frac{1}{4}$ of 15/16 of 7/8.

EXHIBIT A-1 — Page 38

**PRODUCING LEASES
KINGFISHER COUNTY, OKLAHOMA**

5980 Isol Walker
The following described Oil and Gas Leases:

Lessor	Lessee	Date	Recorded		Interest
			Book	Page	
Isol Walker et vir	Wilcox Oil Company	4-12-57	167	518	1/8
Otha J. Acre et al	Wilcox Oil Company	4-12-57	167	520	3/8
James S. Acre et al	Wilcox Oil Company	4-12-57	167	522	1/8
Ben E. Acre et ux	Wilcox Oil Company	4-12-57	167	524	1/8
Nellie Bredbeck et vir	Wilcox Oil Company	4-12-57	167	526	1/8
Frona George et al	Wilcox Oil Company	4-12-57	167	528	2/40
Helen Gomer et vir	Wilcox Oil Company	4-12-57	167	530	1/40
John P. Acre et ux	Wilcox Oil Company	4-12-57	168	610	1/40
Ella Keller et vir	Wilcox Oil Company	4-12-57	226	142	1/40

Said leases covering 160 acres, being all of the SE/4 Section 8-19N-8W.

Said leases provide for a $\frac{1}{8}$ royalty and Wilcox net interest in production is .87500

5946 Ann Felder
Oil and Gas lease dated February 14, 1957 by and between Ann C. Felder, a femme sole, as Lessor, and L. O. Ward, as Lessee, recorded in Book 165, page 9, covering all interest in 160 acres being all of the SE/4 Section 27-19N-6W

Said lease provides for a $\frac{1}{8}$ royalty.

Wilcox Net interest in production is .87500

5947 John Felder
Oil and Gas lease dated February 14, 1957, by and between John C. Felder et ux, as Lessor and L. O. Ward, as Lessee, recorded in Book 165, page 7, covering all interest in 160 acres being SW/4 Section 35-19N-6W

The lease provides for $\frac{1}{8}$ royalty.

Wilcox owns .87500 net revenue interest.

6446 Cities Service Petroleum Company
An undivided 4.22768% interest in and to the following described oil and gas leases in favor of Calvert Exploration Company, as Lessee:

Lessor	Date	Lease Description	Recorded	
			Book	Page
Cities Service Petroleum Company	6- 1-62	S/2 SW/4 Section 1-18N-9W	232	137
Foster Petroleum Corporation	4-18-62	NW/4 & NW/4 SW/4 Section 35-19N-9W	228	118
Cities Service Petroleum Corporation	6- 1-62	NW/4 & NW/4 SW/4 Section 35-19N-9W	232	135
Cities Service Petroleum Company	6- 1-62	NW/4 Section 36-19N-9W	232	139
(The above leases call for excess royalties as per leases)				

6337 Fern Nelson
An undivided 4.22768% interest in and to the following described Oil and Gas leases:

Lessor	Date	Lease Description	Recorded	
			Book	Page
W. H. Nelson et al	6-28-61	Lots 1, 2, 3, 4 and S/2 N/2 (Also known as N $\frac{1}{2}$) of Section 1-18N-9W	211	591
Louise Bradley, a widow	6-29-61	Lots 1, 2, 3, 4 and S/2 N/2 Section 1-18N-9W	211	589
W. A. Burton, Jr. et ux	6-27-61	S/2 NE/4 & S/2 NW/4 and Lots 1, 2, 3, 4, all in Section 1-18N-9W, excepting a proportionate 1/16 of 7/8 overriding royalty reserved by the lessors on all production	212	284

EXHIBIT A-1 — Page 39

E. S. Hitt	6-11-57	S/2 SE/4 Section 35-19N-9W, excepting a proportionate 1/16 of 7/8 of all oil production and a proportionate 1/8 of 7/8 of all gas production previously reserved by W. O. Allen	169	204
W. O. Allen	6- 9-61	S/2 SE/4 Section 35-19N-9W, excepting a proportionate 1/16 of 7/8 of all oil production and a proportionate 1/8 of 7/8 of all gas production reserved unto lessor	—	—
W. A. Burton, Jr.	6-27-61	S/2 SE/4 Section 35-19N-9W excepting 1/16 of 7/8 of all oil and gas production reserved unto lessor.	212	29

6468 Wm. S. Bailey, Jr.
An undivided 3.96079% interest in and to that certain Oil and Gas Lease dated July 23, 1962, by and between Wm. S. Bailey, Jr., Lessor and Calvert Exploration Company, Lessee, insofar as it covers W/2 SW/4 Section 36-19N-9W

Subject to a proportionate part of 1/16 of 7/8 overriding royalty interest reserved by the Lessor on all production, said override pertaining only to Lessor's interest in said land.

The above lease Numbers 6446, 6337 & 6468 are subject to:

1. Basic operating Agreement dated September 26, 1961, as amended, between Calvert Exploration Company, Operator, and Wilcox Oil Company, et al, Non-Operators, covering all of Sections 1 and 2, Township 18N, Range 9 W and all of Section 35 and 36-19N-9W which agreement provides for basic interest of parties in area covered. (Wilcox participation .0396079)
2. Communitization Agreement dated June 4, 1963 between Wilcox Oil Company, et al, and certain named royalty and mineral owners, forming River Unit #1 covering the NE/4 of Section 2-18N-9W. (Net Revenue Int. .0340245)
3. Communitization Agreement dated June 4, 1963 by and between Wilcox Oil Company, et al, and certain named royalty owners, communitizing the SE/4 of Section 35-19N-9W (Hitt Unit) (Net Revenue Interest .0382367)
4. Pooling Agreement dated June 3, 1963, between Wilcox Oil Company, et al, and certain named royalty and mineral interest owners pooling the SW/4 of Section 35-19N-9W (Nelson Unit)
5. Communitization Agreement dated January 3, 1964, between Wilcox Oil Company, et al, and certain named Royalty and mineral interest owners communitizing all of Section 35-19N-9W (Bertie Gas Unit) (Net Revenue Interest .0334829)
6. Overriding royalties of record.

**PRODUCING MINERALS
KINGFISHER COUNTY, OKLAHOMA**

2545 Joseph S. Choat #1

An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
Lots 1, 2, 3 and 4; S/2 N/2 Section 1-18N-9W

The above interest subject to:

1. Operating Agreement dated September 26, 1961, between Calvert Exploration Company, as Operator, and Wilcox Oil Company, as non-Operator, covering Section 1 and 2-18N-9W and Section 35 and 36-19N-9W, in which Wilcox Oil Company owns 3.96079% W. I.

Net interest in production due to the above mineral interest is 3.1250%.

2546 Joseph S. Choat #2

An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under
S/2 Section 26-19N-9W

The above interest subject to:

1. Operating Agreement dated July 26, 1963, between Calvert Exploration Company, as Operator, and Wilcox Oil Company, et al, as non-Operator, covering S/2 Section 26-19N-9W, in which Wilcox Oil Company owns 25.0000%

Net interest in production from said unit due to the above mineral interest is 25.0000%.

**PRODUCING OVERRIDING ROYALTY
LAFOURCHE PARISH, LOUISIANA**

3142 Adrien Lefort

An undivided $\frac{4}{128}$ of $\frac{8}{8}$ interest in and to the oil, gas and other minerals being $\frac{1}{8}$ of $\frac{8}{8}$ overriding royalty as reserved in Assignment, dated June 1, 1940, from H. F. Wilcox Oil & Gas Company to Brown-woods Oil Corporation, less an aggregate of $\frac{12}{128}$ of $\frac{8}{8}$ overriding royalty as conveyed by various Assignments of record.

**PRODUCING MINERALS
CALDWELL COUNTY, TEXAS**

T-70 John L. Dickson

An undivided $\frac{1}{64}$ interest in and to all the oil, gas and other minerals in and under
40 acres being a part of the Jas. Hinds League, being the same land conveyed by Minerva Hinds to B. D. and Montie Sullivan by Deed recorded in Book 13, pages 169-171, Caldwell County Deed records, to which reference is hereby made and is hereby incorporated by reference for a more particular description, also being the same land described in Mineral Deed dated October 1, 1930, John L. Dickson, Grantor, to H. F. Wilcox Oil & Gas Company of Texas, Grantee, recorded December 1, 1930, reception No. 3247, records of Caldwell County, Texas.

Subject to Oil and Gas lease dated December 1, 1926, from T. A. Tiller, Lessor, to T. N. Smith, Lessee, recorded in Volume 114, page 550, providing for a $\frac{1}{4}$ royalty, operated as T. A. Tiller lease, Wilcox has a $\frac{1}{64}$ of $\frac{8}{8}$ net revenue interest.

**PRODUCING LEASES
CLAY COUNTY, TEXAS**

8707 George W. Scaling

Oil and Gas lease dated September 28, 1948, from George W. Scaling, et al, lessor, to R. Olsen Oil Company, Lessee, recorded in Volume 140, page 553, as amended by instrument dated December 7, 1948, recorded in Volume 167, page 297, covering all interest in the following described land:

Tract 1: 702.50 acres being the East 702.50 acres in a rectangle shape out of the J. Gamble Survey, Abstract 168.

Tract 2: A strip of land in Section 13, lying between Section 14 and the Gamble Survey, containing 5.9 acres.

Tract 3: Section 16, containing 11.6 acres, lying between Section 15 to the East and the Gamble and Wilson Survey to the West.

Tract 4: The North 320 acres of Section 15, H.T. & B RR Co., Survey, Abstract 217.

Tract 5: The South 320 acres of the W. A. Graham Survey, Section 14, Abstract 915, being all of Section 14 not leased to Continental Oil Company as of September 28, 1943.

Tract 6: The West 80 acres of the S/2 of Section 15, H.T. & B Survey, Abstract No. 217.

(Subject to releases and assignments of record, which Wilcox Oil Company may have executed covering part of the Lands included in said lease)

Wilcox Oil Company owns a $\frac{1}{4}$ working interest in all depths under tracts 1, 2, 3, 4, 5 and 6, except in 160 acres being S/2 NW/4, E/2 SW/4 Section 15, H. T. & B Survey, Abstract No. 217 (said exception being out of Tracts 5 and 6) in which acreage Wilcox owns a $\frac{1}{4}$ working interest below the depth of 5794 feet, and under which Wilcox owns the following overriding royalty interest from the surface of the earth to the depth of 5794 feet:

1. 2.050781250% until certain Deed of Trust liens affecting the interest of R. Olsen Oil Company have been satisfied and released.
2. 1.875000% after said liens have been satisfied and released until final liquidation of "the R. Olsen \$1,000,000.00 production payment."
3. 2.050781250% thereafter; said overriding royalty interest being more particularly described in "Partial and Conditional Assignment" dated December 19, 1955, from Wilcox Oil Company, et al, to W. B. Omohundro, recorded in Vol 200, page 459.

Lease provides for $\frac{1}{4}$ royalty and is subject to:

1. Casinghead Contract dated November 1, 1950.
2. Agreement dated October 8, 1943, between R. Olsen Oil Company and H. F. Wilcox Oil and Gas Company.
3. Operating Agreement dated December 9, 1943, between Continental Oil Company, Operator, and H. F. Wilcox Oil & Gas Company, et al, Non-Operators.

**PRODUCING MINERALS
COKE COUNTY, TEXAS**

4777 John L. Redfern

An undivided 7/1024 interest in and to all the oil royalty, gas royalty, royalty in casinghead gas, gasoline and royalty in other minerals in and under and that may be produced and mined from the following described land.

572.80 acres being out of Survey or Section 459, Block 1-A, H & TC RR Co. Survey, Abstract No. 394, described by metes and bounds: said land being that land described in Royalty Deed dated February 8, 1951, from John J. Redfern, Jr., Grantor, to Wilcox Oil Company, Grantee, recorded in Volume 95, page 175; records of Coke County, Texas, reference to said Deed hereby being made, and the description therein is hereby incorporated by reference.

This is a term royalty interest for a period of 20 years from March 26, 1947, and as long thereafter as production is obtained in paying quantities.

Subject to Oil and Gas lease dated June 22, 1944, from C. E. Mathers, et ux, Lessor, to O. W. Greene, Lessee, recorded in Volume 64, page 585, which provides for a $\frac{1}{4}$ royalty.

Subject to "Royalty Owners Unitization Agreement, Jameson Reef Unit; dated October 31, 1950, Sun Oil Company, Operator, in which this acreage was designated Tract 13, with net tract participation in unit being 14.800691% (Net tract participation in unit now being 12.592277%).

**PRODUCING MINERALS
DUVAL COUNTY, TEXAS**

T-73 John L. Dickson

An undivided $\frac{1}{8}$ interest in and to all the oil, gas and other minerals in and under 1024.00 acres being the Land described in Mineral Deed dated December 1, 1936, from H. F. Wilcox Oil & Gas Company of Texas to H. F. Wilcox Oil & Gas Company, recorded December 17, 1936, No. 3075, reference to said Deed hereby being made and the description in said Deed is hereby incorporated by reference.

Subject to Oil and Gas leases of record in which Wilcox Oil Company has a $\frac{1}{8}$ of $\frac{1}{8}$ net revenue interest.

**PRODUCING MINERALS
ECTOR COUNTY, TEXAS**

4498 Agnes S. Nicholls

An undivided $\frac{7}{2560}$ interest in and to all the oil, gas and other minerals in and under 669.3 acres being Section 8, Block 42 Township 2 South, Texas and Pacific Railway Company Survey.

Subject to Oil and Gas leases of record which provide for a $\frac{1}{8}$ royalty, operated as H. C. Foster, H. C. Foster "B", H. C. Foster "C" and H. C. Foster "D" leases in which Wilcox has a $\frac{7}{2560}$ of $\frac{1}{8}$ net revenue interest.

**PRODUCING LEASES
GRAY COUNTY, TEXAS**

T-34 Phebe Lease

Oil and Gas lease dated May 20, 1927 from Phebe A. Worley, widow, and Albert Combs, Lessors, to H. F. Wilcox Oil & Gas Company, as Lessee, recorded in Volume 34, page 522, insofar as said lease covers:

30.1 acres out of Survey 40, located in Block 3 of the I & G.N. RR Co., Grant.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Agreements of 1957 wherein Wilcox acquired all but $\frac{3}{56}$ of the $\frac{7}{8}$ working interest outstanding in the lessors by virtue of an agreement of May 20, 1957, wherein the Lessors reserved a $\frac{1}{2}$ of $\frac{1}{8}$ working interest.

Wilcox Net Interest in production $\frac{53}{56}$ of $\frac{7}{8}$.

6204 Inez Carter

The following Oil and Gas leases insofar as they cover the following described land in Gray County, Texas.

SW/4 of Section 84, Block 3, I&GN RR Co., Survey, containing 160 acres more or less.

Lease	Date	Lessor	Lessee	Recordation	Interest
a	3-11-60	Inez Carter et al	Wilcox Oil Co.	Vol. 232 Page 179	$\frac{7}{8}$
b	3-11-60	Socony Mobil Oil Co.	Wilcox Oil Co.	Vol. 233 Page 94	$\frac{1}{8}$

Each of the above leases provide for a $\frac{1}{8}$ royalty interest and are subject to:

1. Additional $\frac{1}{16}$ of $\frac{7}{8}$ overriding royalty interest in lessors by virtue of lease provision

Wilcox net interest in production $\frac{15}{16}$ of $\frac{7}{8}$

T-3 Wilcox-Worley

Oil and Gas lease dated December 21, 1923 from Phebe A. Worley, widow, and E. A. Reynolds, et ux, Lessors to F. W. Dilliard, Lessee, recorded in Volume 2 at page 156 of the records of Gray County, Texas, insofar as said lease covers:

All of Section 62 and W/2, N/2 NE/4, SE/4 NE/4, E/2 SE/4, SW/4 SE/4 Section 61; NE/4 Section 84, All in Block 3, I & G.N. RR Co. Survey

Lease provides for a $\frac{1}{8}$ royalty

Wilcox Net interest in production .875000

T-4 Wilcox Combs

Oil and Gas lease dated December 21, 1923 from Phebe Worley, widow and Albert Combs, Lessors, to F. W. Dilliard, Lessee, recorded in volume 2, page 155 of the records of Gray County, Texas, insofar as said lease covers:

W/2 Section 35; E/2 Section 37; W/2 Section 38; E/2 SW/4 Section 39; W/2 NE/4 Section 58; All of Section 59 and All of Section 60, in Block 3, I&GN RR Co., Survey.

Lease provides for a $\frac{1}{8}$ royalty interest and is subject to:

1. Casinghead Gas Contract dated December 14, 1955 as amended between Sinclair & Phillips Petroleum Company.

Wilcox net interest in production .875000

EXHIBIT A-1 — Page 43

**PRODUCING MINERALS
GRAY COUNTY, TEXAS**

T-1 T. B. Haggard

An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
W/2, Survey 112, Blk 3, I&G. N. Ry. Survey

The above interest is subject to:

1. Oil and gas lease, dated August 19, 1925, from T. B. Haggard, et ux, as lessor, to Roxana Petroleum Corporation, as Lessee, recorded in Book 2, page 314, covering NW/4 Section 12, Blk 3, I&G.N. RR Company Survey, and oil and gas lease dated October 24, 1924, from T. B. Haggard, et ux, as Lessor, to R. R. Osborne, as Lessee, recorded in Book 2, page 297, covering SW/4 Section 112, Blk 3, I&GN RR Company Survey. Both of the foregoing leases provide for $\frac{1}{8}$ royalty.
2. Unit Agreement for Southwest Pampa Dolomite Unit, dated February 9, 1962, between Cities Service Oil Company, as Operator, and Gulf Oil Corporation, et al, as Non-Operator, insofar as said Unit covers NW/4 Section 112, Blk 3, I&GN RR Co., Survey.

Net interest in production from said Unit 0.42558%

T-66 J. H. Palmer

An undivided $\frac{1}{28}$ interest in oil, gas and other minerals in and under
Survey No. 31, Blk B-2 H&GN Survey

Said interest is subject to:

1. Oil and Gas lease dated June 26, 1924, from J. H. Palmer, et ux, as Lessor, to Parish, Watts, Collins & Crosby, as Lessee, recorded in Book 1, page 459, covering West 200 acres, Section 31, Blk B-2, H&GN RR Co., providing for a $\frac{1}{8}$ royalty.
2. Oil and Gas lease dated March 11, 1926, from J. H. Palmer, et ux, as Lessor, to Phillips Petroleum Company, as Lessee, recorded in Book 3, page 1, covering East 83.14 acres Survey 31, Blk B-2, providing for $\frac{1}{8}$ royalty.

T-75 G. H. Saunders #2

An undivided $\frac{7}{2560}$ interest in and to the oil, gas and other minerals in and under
SW/4 Section 4, Blk 1, A. C. H. & B Survey

Said interest being subject to:

1. Oil and Gas lease of record to Skelly Oil Company providing for $\frac{1}{8}$ royalty.

T-76 G. H. Saunders #3

An undivided $\frac{1}{1280}$ interest in and to the oil, gas and other minerals in and under
NW/4 Section 4, Blk 1, A.C.H.&B Survey

Said interest is subject to:

1. Oil and Gas lease dated January 26, 1926, from G. H. Saunders, as Lessor, to Magnolia Petroleum Company, as Lessee, recorded in Book 29, page 290, covering W/2 NW/4 Section 4, Blk 1, A.C.H. & B. Survey, providing for $\frac{1}{8}$ royalty.
2. Oil and gas lease dated February 19, 1961, from Wilcox Oil Company, as Lessor, to A. T. Parton, as Lessee, recorded in Book _____, page _____, covering E/2 NW/4 Section 4, Blk 1, A. C. H. & B Survey, providing for $\frac{3}{16}$ royalty.

T-77 G. H. Saunders #4

An undivided $\frac{1}{160}$ interest in the oil, gas and other minerals in and under
SW/4, Section 3, Blk 1, A. C. H. & B Survey

Said interest subject to:

1. Oil and Gas lease dated December 13, 1922, from L. O. Saunders, et al, as Lessor, to The Texas Company, as Lessee, recorded in Book 25, page 224, covering among other lands, SW/4 Section 3, Blk 1, A. C. H. & G Survey.

T-78 G. H. Saunders #5

An undivided $\frac{1}{1280}$ interest in and to the oil, gas and other minerals in and under
NE/4 Section 4, Blk 1, A. C. H. & B. Survey

Said interest is subject to:

1. Oil and Gas lease of record to The Texas Company providing for $\frac{1}{8}$ royalty.

T-74 G. H. Saunders #1

An undivided 1/512 interest in and to the Oil, gas and other minerals in and under
SE/4 Section 4, Blk 1, A. C. H. & B Survey

Said interest is subject to:

1. Oil and Gas lease dated January 25, 1926, from G. H. Saunders, et ux, as Lessor, to G. T. Oliver, as Lessee, recorded in Book 2, Page 322, covering E/2 SE/4, Section 4, Blk 1, A. C. H. & B., providing for $\frac{1}{8}$ royalty.
2. Oil and Gas lease dated December 18, 1922, from G. H. Saunders, et ux, as Lessor, to The Texas Company, as Lessee, recorded in Book 25, page 224, covering W/2 SE/4 Section 4, Blk 1, A. C. H. & B. Survey, providing for $\frac{1}{8}$ royalty.

**PRODUCING LEASES
LIPSCOMB COUNTY, TEXAS**

4483 Marie Bechthold

All interest in and to Oil and Gas lease dated March 18, 1949, from Chris H. Bechthold, et ux, as lessor, to Wilcox Oil Company, as Lessee, recorded in Book 64, page 136, covering
800 Acres Being All Section 27; NE/4 Section 61, Blk 10, HT & B RR Co. Survey

Said lease provides for $\frac{1}{8}$ royalty subject to:

1. Unit Designation dated June 12, 1963, executed by Apache Corporation, et al, recorded in Book 101, page 219, and re-recorded in Book 101, page 888, by Ratification recorded in Book 103, page 173, insofar as said lease covers Section 61, Blk 10, HT&B Survey.
2. Operating Agreement dated May 18, 1962, between Apache Corporation, as Operator, and Wilcox Oil Company, as Non-Operator, as amended by instrument dated April 20, 1964 by which Wilcox Oil Company was appointed Operator, covering Section 61, Blk 10, HT&B Survey, insofar as said lease covers NE/4, Section 61, Blk 10, HT&B Survey, in which Wilcox Oil Company owns 25.0000% W. I.

Wilcox net interest in production as to portion of lease subject to (2) above is 21.8750%

Wilcox Net interest in production not subject to (2) above is 87.5000%

**PRODUCING OVERRIDING ROYALTY
MONTAGUE COUNTY, TEXAS**

3346 Mabel C. Fleming ORI

A variable overriding royalty interest in oil and gas amounting to 1/8 of 7/8 on flowing wells and 1/16 of 7/8 on pumping wells, created by Assignment dated December 1, 1942, as amended, May 20, 1943, by and between H. F. Wilcox Oil and Gas Company, Assignor, and Charles Million, Assignee, recorded in Book 254, page 170 of the records of Montague County, Texas, insofar as said interest covers

The North 74 acres of a certain tract of land situated in Montague County, Texas, on the waters of the Red River about 19 $\frac{1}{2}$ miles Northeast from the Town of Montague, being Part of the land patented to W. W. Wickliffe, Assignee of W. G. Hill; Beginning at a stake in the WBL of the George Dooley Survey from the SEC of W. D. Griffith Survey; thence West with the SBL of said Survey 950 vrs to the NWC of tract herein conveyed; thence South 469 vrs; thence East 100 vrs; thence South 481 vrs; thence East 841 9/10 vrs; thence North 950 vrs to the place of beginning, and containing 148 acres of land, more or less.

Said interest is subject to:

1. Communitization Agreement dated July 14, 1943 between Continental Oil Company, Wilcox Oil Company, et al forming a 86 acre Unit.

Net interest in production:

From flowing wells:	.094113 ORI
From pumping wells:	.047057 ORI

**PRODUCING MINERALS
WARD COUNTY, TEXAS**

4899 Sloan Royalty

All of Wilcox Oil Company's interest (being various fractional interests) in all of Section 16, save and except the SW/2 N/4, located in Block 5, H&TC Ry. Survey, Ward County, Texas.

Said interests are subject to:

1. Unitization Agreement for the Shipley Queen Sand Unit, dated March 25, 1955, unitizing entire area covered by Wilcox interest.

Net revenue interest in Unit:

Unit Tract 11 A

Being the W/4 (NW/4): .000211 R. I.

Unit Tract 11B

Being the S/4 (SW/4): .008508 R. I.

Unit Tract 13

Being the E/2 N/4 (E/2 NE/4) .0023567 R. I.

Unit Tract 14

(Being the NW/4 NE/4 & NE/4
NE/4 and SE/4 NE/4, NE/4 SE/4,
SE/4 SE/4, SW/4 SE/4, SE/4
SW/4 & SW/4 SW/4, NW/4 SW/4,
SW/4 NW/4, NW/4 NW/4 & NE/4
NW/4, all in the SE/4 of Section 16): .0005338 R. I.

Unit Tract 15

(Being the SW/4 NE/4 & NW/4
SE/4 & NE/4 SW/4 & SE/4 NW/4
all in the SE/4 of Section 16): .000535 R. I.

**PRODUCING MINERALS
WEBB COUNTY, TEXAS**

T-81 John L. Dickson

An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in and under
80 acres being All of Block Eleven (11) and all of Block Fourteen (14) of Survey No. 753, Abstract
1332, certificate No. 4587 G. G. & S. F. Ry Survey

T-81 John L. Dickson

An undivided $\frac{1}{16}$ interest in and to all the oil, gas and other minerals in and under
80 acres being E/2 SE/4, all of Block 12 and all of Block 13, of Survey No. 753, Abstract No. 1332,
certificate No. 4587, G. C. & S. F.

Subject to Oil and Gas leases of record, which are operated as follows:

1. Block 11, Survey No. 753 — Cole R. Benavides "E" lease. Wilcox net revenue interest $\frac{1}{8}$ of $\frac{1}{8}$ R. I.
2. Block 12 and 13, Survey No. 753 — Lyng R. Benavides "D" lease — Wilcox net revenue interest $\frac{1}{16}$ of $\frac{1}{8}$ R. I.
3. Block 14, Survey 753 — Turner R. Benavides "F" lease — Wilcox net revenue interest $\frac{1}{8}$ of $\frac{1}{8}$ R. I.

**PRODUCING MINERALS
UPSHUR COUNTY, TEXAS**

T-82 Sallie King Royalty

An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under, and that may
be produced from the following described land situated in Upshur County, Texas:

Being 60 acres, more or less, being a part of the James Scott Survey, and described in deed from
R. T. Mattox to James King recorded in Volume Y, Page 637 to 638 of the deed records of Upshur
County, Texas, to which reference is hereby made for complete description.

Said mineral interest is subject to:

1. Operating Agreement dated June 22, 1960, between C. H. Lyons, et al, Operators and Wilcox Oil Company, et al, Non-Operator.
2. Unit Designation dated June 22, 1960, forming a 43.68 acre unit for the production of oil and associated hydrocarbons (King Crow Unit).
3. Oil Purchase Agreement with Sanlock Oil Company.

Net Interest in Unit: .0572345

Net Interest in area outside of Unit: .500000

EXHIBIT A-1—Page 46

EXHIBIT A-2

TO THAT CERTAIN CONVEYANCE DATED JULY 21, 1964, BY AND BETWEEN WILCOX OIL COMPANY, GRANTOR, AND W X C COMPANY, GRANTEE

STATE OF ARKANSAS COUNTY OF UNION

NON-PRODUCING MINERALS

- 2638 John L. Dickson et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 10 acres being S/2 S/2 NW/4 NW/4, Section 8-16S-15W
- 2637 John L. Dickson et ux: An undivided $\frac{1}{64}$ interest in and to the oil, gas and other minerals in and under 20 acres being W/2 NW/4 SW/4 Section 11-17S-14W

STATE OF MISSISSIPPI COUNTY OF CARROLL

NON-PRODUCING MINERALS

- 3262 R. C. Fain: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 306.50 acres being all that part of the E/2 SW/4 lying South of Big Sand Creek, S/2 SW/4 SW/4 Section 11, NW/4, E/2 SW/4, W/2 W/2 SE/4 Section 14-19S-3E
- 3263 R. C. Fain: an undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 140.00 acres being N/2 NE/4, SE/4 NE/4 Section 36-20N-3E, SW/4 NW/4 less 22.00 acres off of East side, Section 31-20N-4E
- 3264 R. C. Fain: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 50.00 acres being NE/4 NW/4, 10.00 acres off the North end of SE/4 NW/4 Section 36-20N-3E

NON-PRODUCING LEASES ROOSEVELT COUNTY, MONTANA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5659	10-18-54	Nancy Kennedy Standing — Contract #14-20-256-804	All interest in 40.00 acres being NE/4 SE/4 Sec. 1-27N-52E	—	—
5660	10-18-54	Julia Foote Red Feather Walker — Contract #14-20-256-805	All interest in 811.85 acres being Lots 1, 2, E/2 NW/4 & NE/4 Sec. 18-28N-53E	—	—

STATE OF MONTANA COUNTY OF SWEET GRASS

NON-PRODUCING MINERALS

- 3894 John G. Ellinghausen et ux: An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in and under 400.00 acres being lots 1, 2, 3, S/2 NE/4, SE/4 NW/4, E/2 SW/4, W/2 SE/4 Section 1-1N-14E

NON-PRODUCING LEASES DUNDY COUNTY, NEBRASKA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6292	7- 3-61	Walter C. McBride et ux	All interest in 160.00 acres being SW/4 Sec 13-4N-37W	X	135

**NON-PRODUCING LEASES
FRONTIER COUNTY, NEBRASKA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6251	7-30-60	Zelma Bose et ux	All interest in 320.00 acres being E/2 NW/4, NE/4, E/2 SE/4 Section 19-5N-25W	21	712
6253	7-27-60	Roy Burton et ux	All interest in 320.00 acres being NW/4 Section 29, E/2 NE/4, N/2 SE/4 Section 30-8N-29W	21	668
6254	7-27-60	George S. Willford et ux	All interest in 160.00 acres being NW/4 Section 12-7N-29W	21	711
6255	8- 4-60	W. L. Stubblefield	All interest in 400.00 acres being NW/4, W/2 SE/4 Section 28, NE/4 NE/4 Section 20, N/2 NW/4, SE/4 NW/4 Section 21-7N-25W	22	13
6257	8- 5-60	James Hazen	All interest in 160.00 acres being W/2 NE/4, E/2 NW/4 Section 8-7N-26W	22	14
6260	6-26-60	Charles A. Ramels et ux	All interest in 320.00 acres being NE/4, E/2 NW/4 Section 13, S/2 SE/4 Section 12-6N-29W	21	666

**NON-PRODUCING LEASES
FURNAS COUNTY, NEBRASKA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6261	6-29-60	Guy E. Fetters et ux	All interest in 320 acres being E/2 Section 7-3N-24W	Z	72
6259	8- 2-60	Elmer Peterson et al	All interest in 240 acres being NW/4, W/2 SW/4 Section 18-4N-24W	Z	230

**STATE OF NEW MEXICO
COUNTY OF CHAVES**

NON-PRODUCING MINERALS

- 2547 C. W. Mandler et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 220.00 acres being N/2 Section 9-7S-27E, less and except the West 100.00 acres of the NW/4 Section 9-7S-27E
- 2548 C. W. Mandler et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320.00 acres being E/2 Section 15-7S-28E

**NON-PRODUCING LEASES
SAN JUAN COUNTY, NEW MEXICO**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6121	9-19-57	Navajo Tribe of the Navajo Reservation (Contract # 14-20-600-3532)	$\frac{1}{2}$ interest in 1920.00 acres being Section 9 (Fractional), Section 10 (Fractional), Section 15, Section 16-32N-16W, all land being unsurveyed	—	—

**NON-PRODUCING LEASES
BARBER COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5329	8-29-63	James J. Swartz et al	All interest in 240 acres in S/2 NW/4 & SW/4 Section 14-34S-10W	111	599
5330	8-29-63	James J. Swartz et al	All interest in 160 acres in S/2 NE/4 & N/2 SE/4 Section 14-34S-10W	111	597

EXHIBIT A-2—Page 2

NON-PRODUCING LEASES CLARK COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5695	2- 7-56	Frank L. Tedford et ux	All interest in 240 acres in SE/4 & E/2 SW/4 Section 35-30S-25W	138	22
5696	2- 7-56	E. E. Tedford, et ux	All interest in 160 acres in NE/4 Section 35-30S-25W	22	139
5697	2- 8-56	Flora J. Abell	All interest in 640 acres in E/2 Section 19 & W/2 Section 20-31S-23W	22	140
5700	2-13-56	May C. Smith, et al	All interest in 320 acres in E/2 Section 7-30S-22W	22	161
5701	2-13-56	May C. Smith, et al	All interest in 160 acres in NW/4 Section 8-30S-22W	22	162
5702	2-13-56	T. W. Cummings, et ux	All interest in 320 acres in N/2 Section 26-30S-24W	22	163
5703	2-13-56	R. E. King, et ux	All interest in 320 acres in S/2 Section 27-30S-24W	22	164
5707	2- 8-56	Dora B. Cleaver, et al	All interest in 400 acres in NE/4 & SW/4 Section 5 and E/2 SE/4 Section 6-31S-23W	22	167
5717	2-28-56	Edna D. Shoyer, et al	All interest in 320 acres in NW/4 & N/2 S/2 Section 16-31S-24W	22	172
5718	2-28-56	Edna D. Shoyer, et al	All interest in 160 acres in SE/4 Section 9-31S-24W	22	173
5720	2-12-56	Maude Ramsey	All interest in 160 acres in SE/4 Section 17-30S-25W	22	183
5721	3-12-56	Dwight P. Jones	All interest in 160 acres in SW/4 Section 16-30S-25W	22	184

NON-PRODUCING LEASES COMANCHE COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6299	8-21-61	Ora A. Baker, et ux	All interest in 160 acres in NW/4 Section 25-33S-20W	21	71
6300	8-21-61	Rose Norton, a widow	All interest in 160 acres in SE/4 Section 26-33S-20W	21	70
6302	8-21-61	Mable Rich, a widow	All interest in 160 acres in SW/4 Section 1-33S-20W	21	75
6438	8-21-61	Mable Rich, et al	All interest in 160 acres in Lots 3 & 4 & S/2 NW/4 Section 1-33S-20W	21	74

STATE OF KANSAS COMANCHE COUNTY

NON-PRODUCING MINERALS

- 2217 Edward Snavelly, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 320 acres being SW/4, N/2 NW/4, SW/4 NW/4, NW/4 NE/4 Section 26-34S-18W
- 2218 Edward Snavelly, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 805 acres being SW/4 Section 25; SE/4, less 15 acres out of SW/corner Section 26-33S-19W

**NON-PRODUCING LEASES
DECATUR COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6420	1-30-57	Martin Unger et ux	¼ interest in 160 acres in NW/4 Section 24-2S-30W subject to 1/16 of 7/8 ORI	26	622

**NON-PRODUCING LEASES
EDWARDS COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5561	2-15-55	Esther G. McClanahan	All interest in 160 acres in Lots 1, 2 & 5 & S/2 NE/4 Section 28-26S-19W	87	43
5596	3-17-55	Dale Lancaster et al	All interest in 160 acres in SE/4 Section 2-25S-19W	87	71
5597	3-17-55	Dale Lancaster et al	All interest in 255 acres in all that portion of the NW/4 & NE/4 lying East of the public road and the E/2 SE/4 & NW/4 SE/4 of Section 11-25S-19W	37	82
5598	3- 4-55	Louis Lockwood et ux	All interest in 160 acres in NE/4 Section 8-25S-19W	37	63

**STATE OF KANSAS
EDWARDS COUNTY**

NON-PRODUCING MINERALS

1488 R. E. Israel, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 280 acres being NE/4, N/2 SE/4, SE/4 SE/4 Section 31-26S-17W

**NON-PRODUCING LEASES
ELLIS COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6485	11-30-62	Ralph C. Bowlby et al	¼ interest in 160 acres being SW/4 Section 1-11S-16W Subject to 1/16 of 7/8 ORI	203	465
6486	11-30-62	Ralph C. Bowlby et al	¼ interest in 160 acres being NE/4 Section 1-11S-16W Subject to 1/16 of 7/8 ORI	203	467

**NON-PRODUCING LEASES
FINNEY COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
4817	7-24-61	Geneva Adelia Davis, Individually & Gdn.		OG45	450-1
	7-24-61	John W. Davis et ux	½ interest in 320 acres being NW/4 Sec- tion 29 and SE/4 Section 30-21S-31W	OG44	471-2
4821	4-13-61	E. Mearl Hutton et ux	All interest in 414 acres being Lots 1, 2 & S/2 NE/4 & SE/4 Section 1-26S-31W	OG44	535-6
4950	4-13-61	Melvin O. Nuss et ux	All interest in 160 acres being SE/4 Sec- tion 9-23S-28W	OG44	418-9
6293	7-24-61	Geneva Adelia Davis, Individually & Gdn.		OG45	448-9
	7-10-61	John W. Davis et ux	½ interest in 480 acres being W/2 & SE/4 Section 31-21S-31W	OG45	446-7
6298	8-23-61	Ora N. Phipps et ux	All interest in 160 acres being SW/4 Sec- tion 2-23S-28W	OG45	506-7
6301	8-24-61	Clyde E. Muffitt et ux	All interest in 320 acres being N/2 Sec- tion 30-22S-28W	OG45	527-8
6305	8-24-61	Sam Swingle et ux	All interest in 320 acres being S/2 Section 13-23S-29W	OG45	538-9
6328	9- 1-61	Ontje A. Oltmans et ux	All interest in 320 acres being N/2 Sec- tion 6-22S-31W	OG45	682-4
6336	10- 1-61	Robert D. Norton et ux	All interest in 80 acres being S/2 NE/4 Section 10-23S-27W	OG46	61-2
6417	8-24-61	Garland Phipps et ux	All interest in 160 acres being NW/4 Sec- tion 11-23S-28W	OG45	509-10
6462	10- 1-61	Robert D. Norton et ux	All interest in 80 acres being N/2 NE/4 Section 10-23S-27W	OG45	58-9

**NON-PRODUCING LEASES
FORD COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5622	6-22-55	Mary Mathis et vir	All interest in 160 acres in SE/4 Section 17-26S-21W	7	603
5623	6-14-55	Mary Mathis et vir	All interest in 160 acres in NE/4 Section 20-26S-21W	7	605

NON-PRODUCING LEASES GOVE COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5955	3-7-57	R. D. Adams et ux	All interest in 80 acres being W/2 SW/4 Section 5-14S-27W	11-H	304
5956	3-7-57	R. D. Adams et ux	All interest in 80 acres being N/2 NE/4 Section 8-14S-27W	11-H	305
5957	3-8-57	Glen Albin et ux	All interest in 320 acres being E/2 Section 22-14S-27W	11-H	306
5958	3-7-57	Lester Albin et ux	All interest in 320 acres being S/2 Section 29-14S-27W	11-H	307
5959	3-8-57	Willis Hockersmith et ux	All interest in 320 acres being NW/4, N/2 SW/4 & N/2 SE4 Section 28-12S-31/W	11-H	308
5965	3-15-57	Floyd S. Burris et ux	All interest in 320 acres being W/2 Sec- tion 12-18S-31W	11-H	330
5971	4-3-57	R. H. Thomas et ux	All interest in 480 acres being E/2 & NW/4 Section 25-11S-31W	11-H	343
6502	3-1-63	Felix Bechard et ux	All interest in 320 acres being E/2 Section 3-11S-29W	12	335-6
6503	3-1-63	George A. Heier et ux	All interest in 320 acres being N/2 Sec- tion 10-11S-28W	12	337-8
6504	3-1-63	Joseph Zerr, a widower	All interest in 320 acres being E/2 Sec- tion 33-11S-28W	12	327-8
6505	3-5-63	Anthony Kuntz et ux	All interest in 320 acres being Lots 3 & 4 & S/2 NW/4 and SW/4 Section 3-13S-27W	12	333-4
6507	3-14-63	Bernard F. Lang et ux	All interest in 320 acres being N/2 Sec- tion 27-11S-27W	12	329-330
6508	4-3-63	Thomas Werth et ux	All interest in 320 acres being E/2 Sec- tion 33-11S-27W	13	237-238
6510	3-20-63	Mike M. Younger et ux	All interest in 320 acres being W/2 Sec- tion 10-12S-27W	12	347-8
6511	3-20-63	Raymond E. Slawson et ux	All interest in 320 acres being S/2 Sec- tion 14-13S-29W	12	389-390
6512	3-25-63	Kermit Johnson et ux	All interest in 320 acres being S/2 Sec- tion 36-14S-29W	12	589-590
6513	4-2-63	Betty Jo Flora et vir	All interest in 400 acres being S/2 & S/2 NE/4 Section 14-12S-27W	13	423-424
6514	3-25-63	Cletus J. Karlin et ux	All interest in 160 acres being NE/4 Sec- tion 12-11S-30W	13	15-16
6515	3-25-63	Cletus J. Karlin et ux	All interest in 160 acres being SE/4 Sec- tion 12-11S-30W	13	17-18
6516	3-6-63	Mattie M. Parsons et al	All interest in 320 acres being N/2 Sec- tion 13-12S-26W	13	87-88
6517	3-20-63	Melissa Boyd, a widow	All interest in 320 acres being E/2 Sec- tion 36-12S-26W	12	573-574
6528	4-5-63	S. S. Ebbert et ux	All interest in 320 acres being W/2 Sec- tion 9-12S-26W	13	549-550
6531	4-23-63	John C. Bowman a single man	All interest in 160 acres being SW/4 Sec- tion 33-11S-26W	13	673-674
6532	4-4-63	Samuel B. Bowman	All interest in 160 acres being NW/4 Sec- tion 33-11S-26W	16	671-672

EXHIBIT A-2—Page 6

**STATE OF KANSAS
COUNTY OF GOVE**

NON-PRODUCING MINERALS

2245 Guy R. Davidson et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 800 acres being Section 35, NW/4 Section 36-15S-28W

**NON-PRODUCING LEASES
GREELEY COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6202	4-22-59	George H. Gill, et ux	All interest in 160 acres in SW/4 Section 25-20S-43W	19	402-3
6203	4- 9-59	William Cannon, et al	All interest in 160 acres in SW/4 Section 31-20S-42W	19	398-9

**NON-PRODUCING LEASES
HARPER COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6136	9-19-57	Eldon L. Fugit, et ux	½ Interest in 160 acres in S/2 S/2 Section 3-31S-5W	48	583

AN UNDIVIDED ONE-HALF INTEREST IN AND TO THE FOLLOWING OIL AND GAS LEASES.

6- 6-64	Grace E. Smith et ux et al	All interest in 160 acres being SE/4 Section 18-25N-22W	—	—
6- 6-64	Grace E. Smith et ux et al	All interest in 158.29 acres being Lots 3, 4 and E/2 of SW/4 Section 18-25N-22W	—	—
6- 6-64	Grace E. Smith et ux et al	All interest in 160 acres being NW/4 Section 13-25N-23W	—	—
6- 6-64	Grace E. Smith et ux et al	All interest in 160 acres being SW/4 Section 13-25N-23W	—	—
6- 6-64	Grace E. Smith et ux et al	All interest in 160 acres being SE/4 Section 13-25N-23W	—	—
6- 6-64	Grace E. Smith et ux et al	All interest in 160 acres being NE/4 Section 14-25N-23W	—	—
6- 6-64	Grace E. Smith et ux et al	All interest in 158.09 acres being NW/4 NE/4 & NE/4 NW/4 & Lots 1 & 2 of Section 18-25N-22W	—	—
6- 6-64	Grace E. Smith et ux et al	All interest in 160 acres being NE/4 Section 13-25N-23W	—	—
	Ashael H. Wills et ux	All interest in 160 acres being E/2 E/4 Section 10-25N-23W	—	—
	Joseph C. Mason et ux	All interest in 160 acres being NE/4 NE/4 & S/2 NE/4 & SE/4 NW/4 Section 18-25N-22W	—	—

NON-PRODUCING LEASES HODGEMAN COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5733	4-30-56	Clara Byrum, et vir	½ interest in 160 acres being NE/4 Section 11-22S-22W	10	519
5735	4-21-56	T. C. Bowie, et ux	All interest in 160 acres being NE/4 Section 12-21S-22W	10	522
5742	4-21-56	O. T. Salmans, et ux	All interest in 160 acres being SE/4 Section 36-21S-23W	10	525
5747	5-11-56	E. D. Miller, et ux	½ interest in 160 acres being SE/4 Section 11-22S-22W	11	131
5823	8-28-56	John Cossman, et ux	All interest in 301 acres being Lots 1, 2, 3, and 4 and E/2 W/2 Section 19-24S-26W	11	184
5839	8-28-56	Quentin A. Doll	½ interest in 640 acres being Lots 1, 2, 3 and 4 and S/2 N/2 and S/2 Section 2-21S-25W	11	204
	8-28-56	W. J. Reiling, et ux	½ interest same as above	11	205
5840	9-10-56	L. S. Durr, et ux	All interest in 320 acres being NE/4 & S/2 NW/4 Section 15-24S-25W	11	217
5841	9-10-56	L. S. Durr, et ux	All interest in 240 acres being SW/4 and N/2 SE/4 Section 15-24S-25W	11	218
5852	8-28-56	John Cossman, et ux	All interest in 160 acres being NW/4 Section 27-23S-26W	11	162
5853	4-21-56	O. T. Salmans, et ux	All interest in 320 acres being N/2 Section 6-23S-22W	11	233
5854	4-21-56	W. L. Trayer, et ux	All interest in 160 acres being SE/4 Section 6-21S-22W	11	125
5861	8-28-56	Christine M. Doll, et al	All interest in 640 acres being Lots 1, 2, 3 and 4 and S/2 N/2 and S/2 Section 3-23S-26W	11	328
5950	8-28-56	John Cossman, et ux	All interest in 160 acres being NE/4 Section 32-23S-26W	11	622
6359	12- 1-61	Harry E. Cole, et ux	All interest in 160 acres being NW/4 Section 12-24S-25W	15	170
6360	12-15-61	Delores Ochs, et vir	All interest in 160 acres being N/2 S/2 Section 11-23S-26W	15	177
6361	12-15-61	Irene Strecker, et vir	All interest in 80 acres being S/2 SW/4 Section 11-23S-26W	15	176
6362	12-15-61	Alice Cotton, et vir	All interest in 80 acres being S/2 SE/4 Section 11-23S-26W	15	175
6387	3-16-62	J. Orville Meyer, et ux	All interest in 320 acres being S/2 Section 12-24S-23W	15	249
6388	3-12-62	Dwight M. Eakin, et ux	All interest in 320 acres being W/2 Section 26-21S-21W	15	245
6413	4-11-62	James P. Mooney, et ux	All interest in 168.65 acres being Lots 1 and 2 and E/2 NW/4 Section 19-24S-22W	16	28
6464	8-30-62	Worth Pitts	19/32 interest in 160 acres being NE/4 Section 12-22S-22W	16	362
	11-27-62	Mid-American Oil Co.	13/32 interest in 160 acres being NE/4 Section 12-22S-22W	17	183

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6465	8-30-62	Worth Pitts	19/32 interest in 160 acres being SE/4 Section 12-22S-22W	16	868
	9-27-62	Mid-American Oil Co.	13/32 interest in 160 acres being SE/4 Section 12-22S-22W	17	184
6494	1-12-63	Robert B. Bacon	¼ interest in 360 acres being S/2 Section 28-21S-21W (Subj. to 1/16 of 7/8 O. R. I.)	17	212
6567	8-29-63	Mae A. Warner, et vir	¼ interest in 160 acres being SW/4 Sec- tion 16-22S-23W	18	116
6574	8-10-64	James C. Campbell	¼ interest in 80 acres being W/2 NE/4 Section 16-22S-23W	18	284
6575	4-20-62	James C. Campbell, et ux	¼ interest in 120 acres being N/2 SE/4 and SE/4 NE/4 Section 16-22S-23W	15	328
6576	7- 3-62	Raleigh Scothorn, et ux	¼ interest in 160 acres being NW/4 Sec- tion 22-22S-23W	16	54
6577	9-11-56	Raleigh Scothorn, et ux	½ interest in 320 acres being W/2 Sec- tion 23-22S-23W	11	599
	9-26-56	Zella E. Hubbell	1/64 interest in 320 acres being W/2 Sec- tion 23-22S-23W	11	600
	8- 7-63	Mid-American Oil Co.	13/128 interest in 320 acres being W/2 Section 23-22S-23W	18	87
	8- 7-63	Gulf Coast Western Oil Co.	1/128 interest in 320 acres being W/2 Section 23-22S-23W	18	97
6619	8-11-62	Sophia Nall, et al	½ interest in 320 acres being Lots 1 and 2 and S/2 NE/4 and SE/4 Section 1-24S- 23W (Subj. to 1/16 of 7/8 O. R. I.)	16	379
6621	11- 7-63	W. H. Schroeder, et al	All interest in 150 acres being NW/4 ex- cept a strip 10 rds. wide along the South side of NW/4 Section 19-22S-24W	18	205
6622	10-16-63	Frances M. Cavanaugh	All interest in 160 acres being NE/4 Sec- tion 19-22S-24W	18	206
6623	10-17-63	Abe Rasmussen, et ux	All interest in 160 acres being SE/4 Sec- tion 19-22S-24W	18	207
6624	9-15-56	Maud Armstrong, et al	¼ interest in 160 acres being SW/4 Sec- tion 15-22S-23W (Subj. to 1/16 of 7/8 O. R. I. when production less than 35 BOPD per well, ½ of ¾ O. R. I. when production more than 35 BOPD per well)	11	403
6627	8- 3-59	Lenora Brown	¼ interest in 160 acres being SW/4 Sec- tion 5-21S-21W (Subj. to 1/32 of ¾ O. R. I.)	12	530

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6631	7-30-59	Charlie Foreman	$\frac{1}{4}$ interest in 160 acres being NW/4 Section 7-21S-21W (Subj. to 1/32 O. R. I.)	12	534
6632	5- 5-61	Bessie Lewis, et vir	$\frac{1}{4}$ interest in 640 acres being E/2 Section 7 and W/2 Section 8-21S-21W (Subj. to 1/32 of 7/8 O. R. I.)	14	286
6633	2-21-62	R. O. Croft, et ux	$\frac{1}{4}$ interest in 160 acres being SW/4 Section 7-21S-21W (Subj. to 1/32 of 7/8 O. R. I.)	15	244
6636	2- 5-64	Anna Webster, et vir	All interest in 109 acres being that part of S/2 of Section 13, lying North of South line of A.T. & S.F. RR R of W, Section 13-22S-22W	18	268
6637	10-26-61	W. C. Macy, et ux	All interest in 56 acres being that part of SW/4 lying South and East of A.T. & S.F. RR R of W, Section 13-22S-22W	15	133
6647	9-16-63	Charles L. Ochs, et al	All interest in 160 acres being NW/4 Section 29-23S-25W	18	212
6648	9-16-63	Charles L. Ochs, et al	All interest in 160 acres being SE/4 Section 30-23S-25W	18	210
6649	9-16-63	Charles L. Ochs, et al	All interest in 160 acres being SW/4 Section 29-23S-25W	18	211
6668	2-27-64	Floyd Eakin	$\frac{1}{4}$ interest in 310 acres being Lots 3, 4 and 5 and SE/4 NW/4 Section 6-21S-21W and SE/4 Section 1-21S-22W (Subj. to 1/16 of 7/8 O. R. I.)		
6404	3-16-62	Helen M. Fall, et vir	All interest in 320 acres being N/2 Section 35-21S-21W	15	253
6638	10-26-61	Clara Smith, et vir	All interest in 75 acres being all W/2 SE/4 lying S.E. of A.T. & S.F. RR Right of Way Section 13-22S-22W	15	134

**STATE OF KANSAS
COUNTY OF HODGEMAN**

NON-PRODUCING MINERALS

2255 I. D. Simons: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 320 acres being E/2 Section 11-22S-22W

AN UNDIVIDED $\frac{1}{2}$ INTEREST IN AND TO THE FOLLOWING OIL AND GAS LEASES:

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
1-21-64		Fred A. Burmeister, et ux	All interest in 80 acres being W/2 SW/4 Section 11-24S-21W.	18	256
1-29-64		Henry L. Burmeister, et ux	240 acres being SE/4 & E/2 SW/4 Section 11-24S-21W.	18	257
1-21-64		Naomi Hardten, et vir	160 acres being NE/4 Section 11-24S-21W.		

**NON-PRODUCING LEASES
KINGMAN COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5522	11-24-54	Louis Heller	All interest in 820 acres being SW/4 Section 23 & NW/4 Section 26-28S-10W	69	553
5530	9- 4-54	Glen W. Mohr et ux	All interest in 160 acres being SE/4 Section 19-27S-8W	69	148
5531	8- 5-54	Mary Young	All interest in 148 acres being SE/4 Section 9-29S-10W, except Tract in SE corner thereof, being 662' by 810'	69	147
5668	3- 2-55	Raymond Heimerman et al	All interest in 150 acres being NE/4 Section 10-27S-5W, except 10 acres in NE corner	78	179
6114	1-25-56	Silas B. Maple et ux	¼ interest in 40 acres being SE/4 NE/4 Section 25-29S-7W	76	167
6115	2-16-57	Blanche M. Sample et vir	¼ interest in 80 acres being W/2 SW/4 Section 29-29S-6W	79	45
6116	2-16-57	Josephine Bentley	½ interest in 80 acres being W/2 NW/4 Section 29-29S-6W	79	46
6117	10-10-57	J. H. Maple et ux	¼ interest in 80 acres being E/2 NE/4 Section 30-29S-6W	81	83
6118	8-29-61	Floyd C. Beard et ux	¼ interest in 160 acres being E/2 NE/4 Section 31 & W/2 NW/4 Section 32, all in 29S-6W	95	286
6119	10-13-56	Esten L. McCormick et ux	¼ interest in 160 acres being SW/4 Section 20-29S-6W	77	98
6135	9-21-57	Nellie Fisher	½ interest in 160 acres being S/2 S/2 Section 28-28S-6W	80	274
6274	1-22-60	Aaron Figge et al	¼ interest in 45 acres being NE/4 NE/4 & East 5 acres of NW/4 NE/4 of Section 25-29S-7W	89	119
	4- 7-60	John H. Maple et ux	¼ interest in East 5 acres being NW/4 NE/4 & NE/4 NE/4 Section 25-29S-7W	90	64
6296	7-28-61	Esten McCormick et ux	¼ interest in 160 acres being E/2 E/2 Section 29-29S-6W	95	217
6401	1-10-62	Wilbur Kaufman et ux	¼ interest in 160 acres being SE/4 Section 7-29S-6W	97	129
6403	10- 1-53	J. H. Maple et ux	¼ interest in 160 acres being E/2 NW/4 & W/2 SE/4 Section 30-29S-6W, except 1/16 of 7/8 ORI	67	489
6568	3- 7-63	Leo F. Brown et ux	¼ interest in 80 acres being W/2 NW/4 Section 10-29S-6W	102	240
6569	8-20-63	John Zerger et ux	¼ interest in 160 acres being NW/4 Section 8-29S-6W	104	147
6570	8-21-63	Waldo J. Zerger et al	¼ interest in 80 acres being E/2 SW/4 Section 5-29S-6W	104	177
6571	9- 3-63	Harvey N. Graber et ux	¼ interest in 160 acres being SE/4 Section 5-29S-6W	104	178

**NON-PRODUCING LEASES
KIOWA COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5480	8-21-54	Vesta Kane et al	All interest in 320 acres being S/2 Section 19-30S-18W	1	68
5564	2- 5-55	R. Frank Ross et ux	All interest in 160 acres being NE/4 Section 24-28S-17W	2	423
5565	2-12-55	Grosvenor Foltz	All interest in 400 acres being E/2 Section 1 and N/2 NE/4 Section 12-27S-18W	2	424
5580	9-29-54	Tom C. Briggs et ux	All interest in 240 acres being SE/4 and E/2 SW/4 Section 27-30S-20W	X	228

**NON-PRODUCING LEASES
LANE COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5820	8-28-56	Charles W. Bretz	All interest in 960 acres being Section 7 N/2 Section 17-17S-28W	21	549
5831	9- 4-56	D. J. Hutchins et al	All interest in 640 acres being Section 8-19S-29W	21	575
5842	9- 7-56	Jay C. Walker et ux	All interest in 480 acres being W/2 Section 17 and NW/4 Section 21, all being in 18S-28W	21	576
6377	2-22-62	J. L. McWhirter et ux	All interest in 320 acres being SW/4 Section 10 and SE/4 Section 9, all in 19S-29W	24	343
6379	3-14-62	Vernon Waterson et ux	All interest in 320 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-17S-28W	24	345
6380	3- 1-62	J. R. Elmore et al	All interest in 160 acres being NE/4 Section 26-16S-28W	24	347
6381	3- 1-62	J. R. Elmore et al	All interest in 160 acres being S/2 SW/4 Section 23 and N/2 NW/4 Section 26, all in 16S-28W	24	349
6382	3- 1-62	J. R. Elmore et ux	All interest in 240 acres being SE/4 and S/2 NE/4 Section 23-16S-28W	24	351
6385	3- 1-62	J. R. Elmore et al	All interest in 160 acres being S/2 NW/4 & N/2 SW/4 Section 23-16S-28W	24	353

**NON-PRODUCING LEASES
LOGAN COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5818	8-11-56	C. F. Dean et ux	All interest in 320 acres being E/2 Section 20-15S-37W	1	437
5966	8-15-57	A. B. Kruse et al	All interest in 320 acres being E/2 Section 5-14S-32W	4	545
5967	3-27-57	Elma A. Ahrens et vir	All interest in 480 acres being E/2 & NW/4 Section 14-11S-33W	5	171
5968	3-14-57	John Kowalski et ux	½ interest in 320 acres being W/2 Section 35-12S-32W	5	163
	3-14-57	Philip Michel	½ interest in 320 acres same as above	5	165
5973	3-14-57	A. C. Ziegler et ux	All interest in 320 acres being N/2 Section 20-12S-32W	4	512

EXHIBIT A-2—Page 12

NON-PRODUCING LEASES MEADE COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6288	7-14-61	Chester M. Rexford, et ux	All interest in 160 acres being NW/4 Section 16-21S-27W	18	150
6289	7-29-61	Joe A. Gerber, et ux	All interest in 160 acres being NW/4 Section 23-31S-27W	18	157
6291	8- 2-61	Mary Lauppe, et vir	All interest in 440 acres being NE/4 SW/4 and S/2 NW/4 and E/2 Section 7-33S-26W	18	168
6303	8-28-61	Chester Rexford, et ux	All interest in 160 acres being NW/4 Sec- tion 17-30S-29W	18	201
	8-28-61	Chester Rexford, et ux	All interest in 160 acres being SW/4 Sec- tion 17-30S-29W	18	200
6304	8-21-61	Mabel Marrs, et vir	All interest in 320 acres being S/2 Sec- tion 30-32S-26W	18	194
6539	7-29-61	Joe A. Gerber, et ux	All interest in 160 acres being SE/4 Sec- tion 23-31S-27W	18	156
6625	12-31-60	Clarice L. Cornett, et vir	½ interest in 400 acres being Lots 6 & 7 and E/2 SW/4 and SE/4 Section 6 and Lot 1 and NE/4 NW/4 Section 7, all in 33S-26W (Subj. to 1/16 of 7/8 O. R. I.)	12	397
	12-31-60	Eva M. Coon	½ interest in 400 acres being same as above described lands	12	398

STATE OF KANSAS COUNTY OF MEADE

NON-PRODUCING MINERALS

2633 John L. Dickson: An undivided ½ interest in and to the oil, gas and other minerals in and under
160 acres being
SE/4 Section 7-34S-27W

NON-PRODUCING LEASES NESS COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5723	3-24-56	Henry Borger, et ux	All interest in 160 acres being NW/4 Sec- tion 28-19S-23W	44	445
5724	3-24-56	Henry Borger, et ux	All interest in 160 acres being SW/4 Sec- tion 28-19S-23W	44	470
5725	3-24-56	Henry Borger, et ux	All interest in 160 acres being SE/4 Sec- tion 28-19S-23W	44	471
6406	5-11-62	Ray Almquist, et ux	All interest in 160 acres being NW/4 Sec- tion 35-20S-25W	56	288
6407	5-11-62	Alfred R. Almquist, et ux	All interest in 160 acres being SE/4 Sec- tion 35-20S-25W	56	286
6408	5-11-62	Ray Almquist, et ux	All interest in 160 acres being SW/4 Sec- tion 35-20S-25W	56	287
6461	2-14-57	E. E. McGinnis, et ux	All interest in 160 acres being SE/4 Sec- tion 34-20S-25W	46	355
6469	8-29-62	Mayme E. Copeland Klein, et vir	All interest in 80 acres being W/2 SE/4 Section 26-20S-25W	56	616

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6578	9-24-63	Dexter Miner, et ux	All interest in 160 acres being NE/4 Section 29-19S-23W	64	190
6579	9-24-63	Dexter Miner, et ux	All interest in 160 acres being NW/4 Section 29-19S-23W	64	192
6580	9-17-63	Donald W. Elbert, et ux	All interest in 160 acres being SW/4 Section 29-19S-23W	64	188
6581	9-5-62	Sadie A. Wagaman	$\frac{1}{2}$ interest in 80 acres being E/2 NW/4 Section 13-19S-24W, Above 4,431' and Subj. to 1/16 of 7/8 O. R. L.	58	352
6582	9- 6-62	Sadie Ruffhead, et al	$\frac{1}{2}$ interest in 80 acres being W/2 SE/4 Section 13-19S-24W, Above 4,431' and Subj. to 1/16 of 7/8 O. R. L.	58	295
6583	8-31-62	Milton A. Boyd	$\frac{1}{2}$ interest in 80 acres being E/2 NW/4 Section 24-19S-24W, Above 4,431' and Subj. to 1/16 of 7/8 O. R. L.	58	357
6596	10- 1-63	Anna D. Stum	All interest in 160 acres being SE/4 Section 29-19S-23W	64	331
6598	10-16-63	Lydia Krug	All interest in 160 acres being NE/4 Section 28-19S-23W	64	434
6599	10-16-63	G. A. Goodman	$\frac{1}{2}$ interest in 680 acres being SE/4 Section 8; W/2 Section 16; SE/4 Section 16; and a tract containing 40 acres, more or less, in NE/4 Section 16, described as follows: beginning at SW corner of said Quarter Section; thence North 136 rods; thence East 48 rods; thence South 136 rods; thence West 48 rods to place of beginning, all in 19S-23W	64	420
6600	10-16-63	G. A. Goodman	$\frac{1}{2}$ interest in 560 acres being W/2 NW/4 Section 9; SW/4 Section 9; and E/2 Section 17, all in 19S-23W	64	393
6601	10-16-63	G. A. Goodman	$\frac{1}{2}$ interest in 640 acres being all of Section 21-19S-23W	64	395
6602	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 240 acres being NE/4 and E/2 NW/4 Section 9-19S-23W	64	397
6603	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being SE/4 Section 9-19S-23W	64	399
6604	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 120 acres being NE/4 except tract containing 40 acres in SW corner of said Quarter Section, Section 16-19S-23W	64	401
6605	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being NW/4 Section 15-19S-23W	64	403
6606	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being NE/4 Section 15-19S-23W	64	405
6607	5-27-63	Anna Goodman	$\frac{1}{2}$ interest in 160 acres being SW/4 Section 15-19S-23W	64	407
6608	5-27-63	Vesta K. Curry, Trustee	$\frac{1}{2}$ interest in 160 acres being SW/4 Section 10-19S-23W	64	409

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6609	5-27-63	Vesta K. Curry	½ interest in 160 acres being NW/4 Section 10-19S-23W	64	411
6610	5-27-63	Vesta K. Curry	½ interest in 160 acres being SE/4 Section 15-19S-23W	64	418
6611	5-27-63	Anna Goodman, et al	½ interest in 240 acres being NW/4 and W/2 NE/4 Section 22-19S-23W	64	415
6612	5-27-63	Anna Goodman, et al	½ interest in 160 acres being SW/4 Section 22-19S-23W	64	417
6626	1-22-64	Irving Doebbeling, et ux	All interest in 80 acres being N/2 SW/4 Section 27-20S-25W	65	236
6634	2-14-57	E. E. McGinnis, et ux	All interest in 160 acres being NE/4 Section 34-20S-25W (Subj. to 1/16 of 7/8 O. R. I.)	Ms46	855
6670	2-18-60	Harry Rowe, et ux	All interest in 320 acres being W/2 Section 33-20S-21W	Ms52	230

**STATE OF KANSAS
COUNTY OF NORTON**

NON-PRODUCING MINERALS

2538	C. W. Mandler et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 33-5S-22W				
2535	C. W. Mandler et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being N/2 SE/4, S/2 NE/4 Section 7-5S-23W				
2566	W. H. Ludwig et ux: An undivided ½ interest and to the oil, gas and other minerals in and under 160 acres being NE/4 Section 35-4S-24W				

**NON-PRODUCING LEASES
PAWNEE COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6661	1-20-64	Lora Woods, a widow	All interest in 160 acres being NW/4 Section 12-21S-20W	M/87	534
6662	1-20-64	Lora Woods, a widow	All interest in 160 acres being NE/4 Section 12-21S-20W	M/87	537
6663	1-20-64	Lora Woods, a widow	All interest in 160 acres being SW/4 Section 12-21S-20W	M/87	536
6664	1-20-64	Lora Woods, a widow	All interest in 160 acres being SE/4 Section 12-21S-20W	M/87	535
	10-30-63	Allie L. Wiles, et vir	½ interest in 160 acres being Lots 1, 2 & S/2 NE/4 Section 1-23S-15W	—	—

**NON-PRODUCING LEASES
PRATT COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5512	12- 2-54	Edward L. Miller, et ux	All interest in 160 acres being SW/4 Section 34-29S-11W	64	455
5513	12- 2-54	Edward L. Miller, et ux	All interest in 80 acres being NW/4 NW/4 Section 28; NE/4 NE/ Section 29-29S-11W	64	457
5514	12- 2-54	Edward L. Miller, et ux	All interest in 160 acres being SE/4 Section 20-29S-11W	64	463
5519	12- 3-54	George D. Inslee, et ux	All interest in 160 acres being SW/4 Section 26-29S-12W	64	473
5969	8-15-57	Guy Ford, et ux	All interest in 240 acres being NW/4 and W/2 NE/4 Section 15-29S-11W	73	267
5970	8-15-57	Margaret Harrington Wheeler, et vir	All interest in 240 acres being SW/4 and W/2 SE/4 Section 15-29S-11W	73	269
6588	9-20-63	T. A. Hacker, et ux	An undivided 1/2 interest in 160 acres being SW/4 Section 28-27S-13W	101	103
6589	8- 6-63	Vernon J. Schaffer, et ux	An undivided 1/2 interest in 480 acres being W/2 Section 21; NW/4 Section 28-27S-13W	101	101
6590	8-14-63	Mildred B. Carver, et al	An undivided 1/2 interest in 220 acres being NE/4, North 60 acres of SE/4 Section 28-27S-13W	101	105
6591	8- 6-63	Charlie Honeman, et ux	An undivided 1/2 interest in 480 acres being E/2 and SW/4 Section 29-27S-13W	101	107
6593	10-23-63	Orville Watson, et ux	All interest in 160 acres being SW/4 Section 2-27S-14W	101	425
6594	10-16-63	Milo Tobias, et ux	All interest in 320 acres being NW/4 and NE/4 Section 2-27S-14W	101	423
6595	10-16-63	Axline Fay Peters	All interest in 160 acres being SW/4 Section 15-27S-14W	101	421
6614	11- 7-63	Dollie Logue	All interest in 160 acres being NW/4 Section 15-27S-14W	101	581
6615	11- 7-63	Dollie Logue	All interest in 80 acres being S/2 NE/4 Section 15-27S-14W	101	583
6616	11- 7-63	Walter E. Shannon, et ux	All interest in 80 acres being N/2 NE/4 Section 15-27S-14W	101	579

**NON-PRODUCING LEASES
RAWLINS COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5774	5- 7-56	Minnie MacKenzie, et al	All interest in 320 acres being E/2 Section 32-5S-31W	5	50

NON-PRODUCING LEASES SCOTT COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
4759	12- 8-60	Fred E. Strickert, a widower	All interest in 160 acres being SE/4 Section 27-18S-32W	Photo I	229
4760	12- 8-60	Fred F. Strickert, a widower	All interest in 160 acres being NE/4 Section 27-18S-32W	Photo I	230
5835	8-30-56	Henry D. Parkinson, et ux	All interest in 320 acres being E/2 Section 11-18S-33W	Photo I	20
5836	8-30-56	Henry D. Parkinson, et ux	All interest in 320 acres being W/2 Section 11-18S-33W	Photo I	21
5862	9-25-56	Lee L. Brown, et ux	All interest in 320 acres being E/2 NW/4 & SW/4 Section 1 & N/2 NW/4 Section 12-16S-32W	Photo I	26
5863	9-25-56	Lee L. Brown, et ux	All interest in 300.71 acres being NW/4 Section 6-16S-31W & SE/4 Section 1-16S-32W	Photo I	25

NON-PRODUCING LEASES SEDGWICK COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
5576	1-14-55	Nick Strunk, et al	All interest in 80 acres being S/2 SE/4 Section 9-29S-1W	M338	581
5577	1-12-55	Nicholas L. Strunk, et ux	All interest in 80 acres being N/2 SE/4 Section 9-29S-1W	M338	585
5578	1-27-55	John N. Perkins, et ux	All interest in 80 acres being S/2 SW/4 Section 9-29S-1W	M338	589
5579	2-17-55	A. Roy Hopkins, et ux	All interest in 80 acres being N/2 SW/4 Section 9-29S-1W	M338	595

NON-PRODUCING LEASES SEWARD COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
4758	11-30-60	George D. Steffen, et ux	All interest in 160 acres being SW/4 Section 20-32S-31W	190	93

NON-PRODUCING LEASES STAFFORD COUNTY, KANSAS

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
10-30-63		Mary Mace Sutton, a widow	½ interest in 160 acres being Lots 3, 4, 5 & SE/4 NW/4 Section 6-23S-14W	—	—
10-30-63		Mary Mace Sutton, a widow	½ interest in 160 acres being Lots 6, 7 & E/2 SW/4 Section 6-23S-14W	—	—

EXHIBIT A-2—Page 17

**STATE OF KANSAS
SHERIDAN COUNTY**

NON-PRODUCING MINERALS

- 2334 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 10-8S-30W
- 2335 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 12-8S-30W
- 2346 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 36-8S-30W
- 2352 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 32-6S-30W
- 2353 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 27-7S-30W
- 2372 George E. Summers: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 13-8S-29W
- 2373 Edwin A. Patterson: An undivided $\frac{1}{2}$ interest in and to the oil, gas and minerals in and under 160 acres being NE/4 Section 15-7S-30W

**NON-PRODUCING LEASES
SHERMAN COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5828	8-13-56	Oren M. Parish, et ux	All interest in 160 acres being SW/4 Section 8-9S-41W	OG13	223
5829	8-13-56	Oren M. Parish, et ux	All interest in 813 acres being S/2 Section 7-9S-41W	OG13	221
5830	8-13-56	Lila L. Parish, et al	All interest in 160 acres being NE/4 Section 7-9S-41W	OG13	219
5858	8-13-56	Emery L. Moore, et ux	All interest in 480 acres being N/2 & SW/4 Section 12-10S-41W	OG13	415

**STATE OF KANSAS
COUNTY OF SUMNER**

NON-PRODUCING MINERALS

- 2634 John L. Dickson: An undivided 1.84375/420ths interest in and to the oil, gas and other minerals in and under 420 acres being Lots 1, 2 and 3, SE/4 NW/4, N/2 NW/4, NE/4, Section 16-35S-3W

**NON-PRODUCING LEASES
THOMAS COUNTY, KANSAS**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5766	6-19-56	George M. Budge, a single man	All interest in 320 acres being N/2 Section 4-10S-36W	2	142
5773	6-20-56	Sam Medford, et ux	All interest in 640 acres being Section 19-9S-35W	2	333
5776	6-19-56	G. W. Gibson, et ux	All interest in 160 acres being SW/4 Section 4 and ½ interest in 160 acres being NW/4 Section 9-10S-36W	2	448
	6-19-56	The Victory Life Ins. Co.	½ interest in 160 acres being NW/4 Section 9-10S-36W	2	452

**STATE OF KANSAS
COUNTY OF THOMAS**

NON-PRODUCING MINERALS

- 2337 George E. Summers: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 34-9S-36W
- 2338 George E. Summers: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 2-9S-36W
- 2336 George E. Summers: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 35-7S-34W

**NON-PRODUCING LEASES
TREGO COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5680	11-30-55	George E. Mai, et ux	All interest in 160 acres being SE/4 Section 33-13S-24W	TTT	331
5994	4-27-57	Glenn O. Speer, et ux	All interest in 160 acres being NW/4 Section 11-14S-23W	AAAA	510
6495	3-11-63	Edward F. Spena, et ux	All interest in 320 acres being E/2 Section 4-13S-25W	A-17	300
6496	3-12-63	Paul H. Sauer, a single man	All interest in 320 acres being E/2 Section 7-14S-25W	A-17	343
6497	3-12-63	Catherine Lacerte, et vir	All interest in 160 acres being NW/4 Section 21-12S-25W	A-17	290
6498	3-12-63	Catherine Lacerte, et vir	All interest in 160 acres being SW/4 Section 21-12S-25W	A-17	292
6499	3-12-73	Walter F. Kline, et ux	All interest in 320 acres being N/2 Section 18-12S-24W	A-17	294
6500	3-14-63	William R. Terpening, a single man	All interest in 160 acres being N/2 N/2 Section 7-13S-24W	A-17	288
6501	3-14-63	James Wedermyer, et ux	All interest in 160 acres being S/2 N/2 Section 7-13S-24W	A-17	296
6518	3-15-63	Leslie C. Frye, et ux	All interest in 160 acres being NW/4 Section 11-15S-25W	A-17	334
6519	3-15-63	Leslie C. Frye, et ux	All interest in 160 acres being SW/4 Section 11-15S-25W	A-17	332
6509	3-12-63	Blaine E. Sites, et al	All interest in 320 acres being S/2 Section 33-13S-25W	A-18	405
6529	3- 8-63	John E. O'Toole, Gdn.	All interest in 320 acres being W/2 Section 8-13S-25W	A-18	401
6530	3- 8-63	John E. O'Toole, Gdn.	All interest in 320 acres being N/2 Section 33-13S-25W	A-18	403

**NON-PRODUCING LEASES
WALLACE COUNTY, KANSAS**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5826	8-10-56	C. F. Dean, et ux	All interest in 320 acres being N/2 Section 36-15S-38W	16	34
6201	4- 7-59	Ray A. Zellner, et ux	All interest in 160 acres being SE/4 Section 19-14S-41W	18	493

**NON-PRODUCING LEASES
ALFALFA COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
3994	3- 7-55	Harvey E. Beltz, et ux	All interest in 160 acres being S/2 NW/4, S/2 SW/4 Sec. 25-27N-12W	128	357
5652	8-27-55	William Harold Crain, et ux	All interest in 221.25 acres being SW/4 Sec. 8, North 61.25 acres of NW/4 Sec. 17-24N-9W	134	18
5653	8-27-55	W. H. Brown, et al	All interest in 320 acres being W/2 Sec. 14-25N-10W	134	21
5656	9-14-55	Vernon Means, et ux	All interest in 160 acres being SW/4 Sec. 13-26N-11W	135	136
5691	1-16-56	Harvey E. Beltz, et ux	½ interest in 80 acres being N/2 SW/4 Sec. 25-27N-12W	139	279
	1-16-56	Edna Beltz Laufer, et vir	½ interest in 80 acres being N/2 SW/4 Sec. 25-27N-12W	139	281
6290	7- 8-55	Mary Pekrul	½ interest in 160 acres being SE/4 Sec. 8-23N-9W	139	13

**STATE OF OKLAHOMA
COUNTY OF ALFALFA**

NON-PRODUCING MINERALS

- 1722 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SW/4 Section 9-24N-10W
- 1723 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SW/4 Section 23-24N-10W, except Right of Way of Arkansas Valley and Western Railway Co.
- 1724 C. A. Hash et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 3-27N-10W
- 1725 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NE/4 Section 25-28N-10W
- 1726 D. L. Edmiston: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 9-23N-11W
- 1738 W. O. Gardiner et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 1-23N-11W
- 1995 W. G. Parker et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 9-23N-12W

**STATE OF OKLAHOMA
COUNTY OF BEAVER**

NON-PRODUCING MINERALS

- 2508 Robert B. Harrington: An undivided ½ interest in and to all the oil, gas and other minerals in and under 760.00 acres being S/2, E/2 NE/4 Section 21, NW/4 NW/4 Section 22, NE/4, N/2 S/2 Section 27-6N-23ECM
- 2573 Dickson Oil Royalty Company: An undivided ¼ interest in and to all the oil, gas and other minerals in and under 160.00 acres being N/2 SW/4, SW/4, Section 31-4N-23ECM, NW/4 NW/4 Section 6-8N-23ECM

**NON-PRODUCING LEASES
BECKHAM COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5645	12-31-54	John Johnson, et al	All interest in 80 acres being S/2 SW/4 Section 15-19N-22W. Subject to a 1/16 of 7/8 ORI	125	24
5648	1- 8-55	Mrs. Mary McMahan	¼ interest in 160 acres being SW/4 Section 16-9N-22W. Subject to a 1/16 of 3/4 of 7/8 ORI	125	98
	1- 8-55	Tom Shipman	¼ interest in 160 acres being SW/4 Section 16-9N-22W. Subject to a 1/16 of 3/4 of 7/8 ORRI	125	26
	6- 8-55	Luther V. Harris, et ux	¼ interest in 160 acres being SW/4 Section 16-9N-22W. Subject to a 1/16 of 3/4 of 7/8 ORI	128	399
5706	4-29-60	Mrs. J. C. (Susie) Allen, et al	All interest in 80 acres being E/2 NE/4 Section 20-9N-22W	170	443
All the above described leases being subject to that certain Operating Agreement dated December 7, 1956, by and between Shell Oil Company, Operator, and Wilcox Oil Company, et al, Non-Operating Parties, covering lands in Section 9, 10, 15, 16, 17, 20, 21 and 22, Township 9 North, Range 22 West, in which Wilcox Oil Company's net interest is 25.15725 percent.					

**NON-PRODUCING LEASES
BLAINE COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5428	5-11-63	Henry Eichelberger, et ux	All interest in 480 acres being N/2 & SW/4 Section 9-13N-13W	90	628
6022	8- 7-57	T. H. McViers, et al	All interest in 160 acres being SE/4 Section 24-15N-11W	51	242

**NON-PRODUCING LEASES
CADDO COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5173	3-15-62	Frank R. King, et ux	All interest in 80 acres being S/2 NW/4 Section 19-9N-13W	362	571
5176	3-15-62	Ben Sylvester, et ux	All interest in 160 acres being NE/4 Section 23-11N-13W	362	573
5180	2- 9-62	Norman E. Hawkins, et ux	All interest in 160 acres being SW/4 Section 14-11N-12W	359	325
5430	4-17-63	Edwin E. Hart, et ux	All interest in 160 acres being NW/4 Section 30-12N-13W	385	275
5432	5- 2-63	Blanche C. Kimble, a widow	All interest in 233.80 acres being in Lots 1 & 2 of NW/4 Section 31-12N-12W & SE/4 Section 36-12N-13W	386	327
5434	4-17-63	Romie R. Reynolds, et ux	All interest in 148.54 acres being Lots 1 & 2 & E/2 NW/4 Section 19-12N-13W	385	113
5799	7-14-56	L. A. Smith, et al	All interest in 160 acres being SE/4 Section 17-11N-12W	251	873
6065	9-30-57	Hainta et al (Contract No. 14-20-206-15052)	All interest in 159.90 acres being NE/4 SW/4; Lot 4 SW/4 & S/2 SW/4 Section 33-8N-13W	—	—
6287	6-22-61	George L. Saathoof, et ux	All interest in 160 acres being SE/4 Section 36-8N-11W	346	295
6533	4-17-63	Leona M. Doffing, et vir	All interest in 80 acres being S/2 NW/4 Section 16-12N-13W	386	325
6534	5- 1-63	Thelma Rose Kimball, et vir	All interest in 160 acres being S/2 SW/4 Section 9 and N/2 NW/4 Section 16-12N-13W	386	329
6537	4-25-63	Ray H. Karlin et ux	An undivided 117/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	195
	4-25-63	Hattie E. Spurrier et vir	An undivided 18/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	197
	4-25-63	Claud S. Calyburn et al	An undivided 42/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	205
	4-25-63	Ethel M. Thompson et vir	An undivided 18/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	199
	4-25-63	Viola B. Jelks et vir	An undivided 9/216 interest in 311.53 acres being Lots 1, 2, 3 & 4 & S/2 N/2 Section 2-12N-12W	387	205
6538	4-29-63	Stella Metz et vir	All interest in 160 acres being NW/4 & ½ interest in 240 acres being SW/4 & W/2 NE/4, all in Section 35-9N-11W	387	185
	5- 9-63	Alan Haight et ux	½ interest in 80 acres being W/2 NE/4 Section 35-9N-11W	387	189
	5-10-63	Fred S. Stephenson et ux	½ interest in 160 acres being SW/4 Section 35-9N-11W	387	191
5485	4- 9-64	Lowell G. Raetz et ux	½ interest in 160 acres being NW/4 Section 33-12N-12W	406	89
	4- 9-64	Dora A. Raetz, a widow	½ interest in 160 acres being NW/4 Section 33-12N-12W	406	91

EXHIBIT A-2—Page 23

**NON-PRODUCING LEASES
CANADIAN COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6015	6-20-57	Clyde Scott et ux	All interest in 200 acres being SW/4 SW/4 Section 13 & NE/4 Section 23-14N-7W	304	300
6016	6-18-57	Kermit K. Scott et ux	All interest in 120 acres being E/2 SW/4 & NW/4 SW/4 Section 13-14N-7W	304	303
6017	6-20-57	Kermit K. Scott et ux	All interest in 160 acres being SE/4 Section 13-14N-7W	304	664
6045	5-20-57	Wesley Dyer et al (Contract No. 14-20-205-929)	All interest in 160 acres being SE/4 Section 4-12N-10W	—	—
6339	11- 3-61	Ammon M. Wright et ux	½ interest in 80 acres being N/2 SW/4 Section 6-12N-5W, (Otherwise described as N. 74.57 acres of SW/4 Section 6-12N-5W)	348	436
6340	11- 3-61	John A. Zaloudik et ux	½ interest in 273 acres being Lots 3 & 4 & S/2 NW/4 and Lot 2 & W. 38.81 acres of E/2 NE/4 Section 1-12N-6W	348	481
		Ammon M. Wright et ux	½ interest in 273 acres being Lots 3 & 4 & S/2 NW/4 and Lot 2 & W. 38.81 acres of E/2 NE/4 Section 1-12N-6W	348	478

**STATE OF OKLAHOMA
COUNTY OF CANADIAN**

NON-PRODUCING MINERALS

- 2701 R. D. Porter: An undivided ½ interest in and to all the oil, gas and other minerals in and under 129.00 acres being Lots 1, 2, NW/4 NE/4, NE/4 NW/4 Section 7-10N-7W

**STATE OF OKLAHOMA
COUNTY OF CARTER**

NON-PRODUCING MINERALS

- 928 J. C. Cooke Oil & Gas Co: An undivided ¾ interest in and to all the oil, gas and other minerals in and under 240.00 acres being W/2 SW/4 NE/4, SE/4 NW/4, E/2 SW/4 NW/4, E/2 SW/4, N/2 SE/4 Section 15-4S-3E
- 944 J. C. Cooke Oil & Gas Co: An undivided ½ interest in and to all the oil, gas and other minerals in and under 80.00 acres being S/2 SE/4 Section 30-4S-3E
- 3444 E. E. Irby et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 30.00 acres being N/2 NE/4 NW/4, NE/4 NW/4 NW/4 Section 9-5S-2W

**STATE OF OKLAHOMA
COUNTY OF CLEVELAND**

NON-PRODUCING MINERALS

- 2007 Odell Henson: An undivided 1/32 interest in and to all the oil, gas and other minerals in and under 160 acres being SE/4 Section 34-10N-1W.
- 2460 F. E. Burns: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160 acres being SE/4 Section 12-7N-1W.
- 2576 Dickson Oil Royalty Company: An undivided 1/320 interest in and to all the oil, gas and other minerals in and under 160 acres being SW/4 Section 4-10N-2W.
- 2650 Edith L. Davis: An undivided 1/16 interest in and to all the oil, gas and other minerals in and under 80 acres being N/2 SE/4 Section 23-6N-1E.

EXHIBIT A-2 — Page 24

**NON-PRODUCING LEASES
CREEK COUNTY, OKLAHOMA**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
388	1- 7-19	The Board of Commissioners of Creek Co., Okla.	Insofar as said lease covers 80 acres, be- ing N/2 SW/4 Section 35-16N-18E	171	280
6144	9-10-62	Kelly Brothers, a Business Trust	All interest in 80 acres being W/2 SE/4 Section 35-16N-8E	918	198
5402	3-21-63	George H. Denham et ux	54.47% interest in 80 acres being E/2 NE/4 Section 22-18N-10E	932	95

**STATE OF OKLAHOMA
COUNTY OF CREEK**

NON-PRODUCING MINERALS

- 358 H. F. Wilcox: All oil, gas and other minerals in and under
40 acres being NE/4 NW/4 Section 28-16N-9E.
- 1685 Margaret Murphy, et vir: An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in
and under
40 acres being SW/4 NE/4 Section 18-16N-10E.
- 2582 Dickson Oil Royalty Company: An undivided $\frac{4}{55}$ interest in and to all the oil, gas and other minerals
in and under
55 acres being NE/4 SW/4, E/2 SE/4 SW/4, except W/2 SW/4 NE/4 SW/4, Section 17-14N-8E
- 2579 Dickson Oil Royalty Company: An undivided $\frac{1}{32}$ interest in and to all the oil, gas and other minerals
in and under
80 acres being E/2 NW/4 Section 7-19N-7E.
- 62 A&B H. F. Wilcox, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
80 acres being S/2 NE/4 Section 13-16N-9E.
- 2577 Dickson Oil Royalty Company: An undivided $\frac{1}{64}$ interest in and to all oil, gas and other minerals in
and under
160 acres being SW/4 Section 16-16N-10E.
- 2580 Dickson Oil Royalty Company: An undivided $\frac{1}{16}$ interest in and to all the oil, gas and other minerals
in and under
40 acres being NW/4 SE/4 Section 20-17N-7E.
- 2581 Dickson Oil Royalty Company: An undivided $\frac{1}{15}$ interest in and to all the oil, gas and other minerals
in and under
120 acres being S/2 NW/4, NW/4 NW/4, Section 16-16N-10E.

**NON-PRODUCING LEASES
CUSTER COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
3756	5-19-54	Leslie Comer, et ux	All interest in 160 acres being NE/4 Section 35-15N-14W	20	211
4714	9- 1-59	Rose Porter Raasch, et vir	All interest in 160 acres being N/2 SE/4 Section 19; N/2 SW/4 Section 20-14N-15W	182	270
4715	9- 2-59	T. M. Ray, et ux	¾ interest in 360 acres being S/2 and SE/4 NE/4 Section 5-14N-19W	135	548
	12-30-59	David G. Wadsworth, et ux	5/36 interest in 200 acres being SW/4 and SE/4 NE/4 and 40/288 interest in 160 acres being SE/4, all in Section 5-14N-19W	135	544
	10-26-59	J. B. Harvey, et ux	4/36 interest in 200 acres being SW/4 and SE/4 NE/4 and 23/288 interest in 160 acres being SE/4, all in Section 5-14N-19W	135	548
	12-30-59	Neva Luella Bader	1/32 interest in 160 acres being SE/4 Section 5-14N-19W	135	546
4726	7-27-60	Elmer E. Kayser, et ux	All interest in 160 acres being NW/4 Section 32-13N-16W	141	407
4781	2-16-61	T. M. Ray, et ux	All interest in 160 acres being S/2 SE/4 Section 15; N/2 NE/4 Section 22-15N-19W	146	496
5051	10-12-60	J. L. Davis, et al	All interest in 200 acres being E/2 SW/4; W/2 SE/4; SE/4 SE/4 Section 26-12N-20W	143	587
5061	10-12-61	Alvin J. Rennels, et ux	All interest in 160 acres being S/2 NE/4; SE/4 NW/4; NE/4 SW/4 Section 4-12N-20W	154	277
5092	2-16-61	James L. Sullivan, et ux	All interest in 160 acres being SW/4 Section 36-12N-18W	147	325
5419	4-18-63	Nelly M. Pitzer, et al	All interest in 400 acres being S/2; E/2 NW/4 Section 2-13N-14W	168	10
5998	6-19-57	Ray Harris, et ux	All interest in 160 acres being NE/4 Section 10-12N-15W	43	605
6000	6-18-57	I. E. Ratliff, et al	All interest in 160 acres being SE/4 Section 15-14N-18W	43	607
6001	6-18-57	I. E. Ratliff, et al	All interest in 160 acres being SE/4 Section 29-14N-16W	43	609
6002	6-21-57	G. P. Snider, et ux	All interest in 320 acres being W/2 Section 20-12N-18W	43	613
6003	6-21-57	G. P. Snider, et ux	¾ interest in 160 acres being NE/4 Section 36-13N-19W	43	611
6004	6-20-57	Edna Helen Klassen, et vir	All interest in 160 acres being SE/4 Section 26-12N-15W	43	619
6005	6-19-57	Ezra Sauer, et al	All interest in 160 acres being SE/4 Section 14-12N-15W	48	1
6018	7-10-57	Keith F. McClelland	All interest in 78.31 acres being Lots 6 and 7 (W/2 SW/4) Section 6-13N-14W	48	23
6056	7-19-57	Little Man (Mihate), et al	All interest in 160 acres being NE/4 Section 36-12N-17W	127	398
6233	5-11-60	Bert M. Phillips, et ux	15/16 interest in 240 acres being NE/4 and N/2 SE/4 Section 21-12N-20W	140	474
	5-11-60	Huff Kelly, et ux	1/16 interest in 240 acres being NE/4 and N/2 SE/4 Section 21-12N-20W	140	479

EXHIBIT A-2—Page 26

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6234	5-11-60	A. E. Richmond, et ux	All interest in 160 acres being NE/4 Section 30-12N-20W	140	482
6249	7-25-60	Adolph B. Kaiser, et ux	All interest in 160 acres being SE/4 Section 19-12N-15W	141	556
6267	1- 6-60	Samuel P. Tallman	All interest in 550 acres being N/2 NW/4 NE/4; W/2 NE/4 NE/4; E/2 SE/4 NE/4; NW/4 SE/4 NE/4, Section 34, N/2 NE/4, Section 35, NE/4; N/2 SE/4; N/2 SW/4; S/2 NW/4 Section 26-12N-19W	136	15
6284	7- 1-60	Grace E. Berrong, et vir	7.2541% interest in 160.08 acres being Lots 1 and 2 and S/2 NE/4 Section 1-13N-16W	142	65
3728	5-13-64	Carl B. Schmitz, et ux	½ Interest in 160 acres being SE/4 Section 30-14N-16W	177	301- 2
6676	3-18-64	John Harley Butler, et ux	All interest in 40 acres being SW/4 NW/4 Section 28-15N-14W	116	19-20
5431	5-11-64	Glenn A. Dickey, et ux	½ Interest in 480 acres being S/2 and NW/4 Section 10-13N-15W	177	360-61
	6- 1-64	W. L. Haynes	¼ Interest in 480 acres being S/2 and NW/4 Section 10-13N-15W	177	362-63
	6- 1-64	W. C. Burris, et ux	¼ Interest in 480 acres being S/2 and NW/4 Section 10-13N-15 W	177	364-65
5450	3-18-64	Ruby L. Straub, a widow	1/16 Interest in 80 acres being N/2 SE/4 Section 29-15N-14W	177	172-73
	3-18-64	Cuba E. Welch, a widow	½ Interest in 80 Acres being N/2 SE/4 Section 29-15N-14W	177	174-75
	3-18-64	Opal Lee, et al	½ Interest in 80 acres being N/2 SE/4 Section 29-15N-14W	177	176-77
	3-18-64	Rosemary Cassini, et vir	1/16 Interest in 80 acres being N/2 SE/4 Section 29-15N-14W	177	178-79
	3-18-64	Maud A. Dean, a widow	½ Interest in 80 acres being N/2 SE/4 Section 29-15N-14W		176-92-93
	3-18-64	John Harley Butler, et ux	½ Interest in 80 acres being N/2 SE/4 Section 29-15N-14W		176-22-23

**STATE OF OKLAHOMA
COUNTY OF CUSTER**

NON-PRODUCING MINERALS

- 2003 Thomas J. Bruce et ux: An undivided $\frac{1}{2}$ interest in and to all oil, gas and other minerals in and under 160.00 acres being S/2 SE/4 Section 5, N/2 NE/4 Section 8-13N-16W
- 2017 Nona B. Parks et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 20-14N-20W
- 2034 Joseph A. Winters et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NE/4 Section 13-14N-17W
- 2047 C. M. Allison et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 200.00 acres being SE/4 SE/4 Section 27-13N-20W, E/2 NE/4, SW/4 NE/4, NE/4 SE/4 Section 34-13N-20W
- 2054 W. A. Trawick et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 29-15N-19W
- 2477 C. A. Strong et vir: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320.00 acres being SW/4 Section 3, E/2 SE/4 Section 4, N/2 NW/4 Section 10-14N-18W
- 2478 C. A. Strong et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 440.00 acres being S/2 SW/4 Section 22, W/2 SW/4, NE/4 SW/4 Section 27, NE/4 Section 28, W/2 NW/4 Section 34-15N-18W
- 2619 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160.00 acres being Lots 1, 2, S/2 NE/4 Section 8-13N-18W
- 2620 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 27-15N-18W
- 2621 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160.00 acres being W/2 NE/4, NW/4 SE/4, NE/4 SW/4 Section 9-14N-19W
- 2622 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 80.00 acres being N/2 SW/4 Section 18-15N-19W
- 2623 Dickson Oil Royalty Company: an undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 80.00 acres being N/2 NE/4 Section 19-15N-19W
- 2624 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 80.00 acres being N/2 SE/4 Section 18-15N-20W

**NON-PRODUCING LEASES
DEWEY COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5746	6- 2-56	James M. Hall	All interest in 160 acres being SE/4 Section 14-18N-17W	89	32
5747	5-28-56	Reuben Pankratz	All interest in 160 acres being E/2 NE/4 Section 34 and W/2 NW/4 Section 35-18N-17W	89	30

**STATE OF OKLAHOMA
DEWEY COUNTY**

NON-PRODUCING MINERALS

- 1714 Frank Swantkoski: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being E/2 NE/4, E/2 SE/4 Section 35-19N-18W
- 1715 Lester M. Whitehead et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 80 acres being W/2 NE/4 Section 33-19N-18W
- 2018 E. W. Kauk et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 35-16N-20W
- 2133 W. H. Lothman et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being W/2 NW/4 Section 15; W/2 SW/4 Section 10-18N-19W
- 2180 A. B. Early Wray et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 240 acres being SE/4, E/2 SW/4 Section 27-19N-19W I.M.
- 2284 Geo. W. Jones: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 2,320 acres being SE/4, E/2 SW/4, Section 13; E/2, N/2 NW/4, SE/4 NW/4, Section 24; NE/4, Section 25-17N-17W I.M.; SW/4 N/2 SE/4 Section 17; E/2 & S/2 SW/4, Section 18; all Section 19; N/2 NW/4 Section 20; Lot 1, NE/4 NW/4, NW/4 NE/4 Section 30-17N-16W I.M.
- 2498 George A. Harrison et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 238.40 acres being E/2 SE/4, Lot 4 and Lot 5, Section 28; Lot 1 and Lot 3, NE/4 NE/4 Section 33-17N-15W

**NON-PRODUCING LEASES
ELLIS COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6294	6-15-56	Wilber Fields, Adm.	All interest in 80 acres being W/2 NW/4 Sec. 15-22N-25W	81	341

**STATE OF OKLAHOMA
COUNTY OF ELLIS**

NON-PRODUCING MINERALS

- 2123 Maggie M. Enfield, et vir: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being Lots 2, 3, 4, 5, Section 6-21N-25W I.M.
- 2138 R. O. Renfrew, et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 240 acres being SW/4 NE/4, SE/4 NW/4, NE/4 SW/4, NW/4 SE/4, Section 29; S/2 NW/4, Section 33-19N-21W I.M.
- 2164 W. M. English, et ux: On undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being S/2 NE/4, NW/4 NE/4, Section 32; SW/4 NW/4, Section 33-17N-23W I.M.
- 2171 W. M. English, et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4, Section 27-23N-25W I.M.
- 2174 Jesse W. Foale et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 200 acres being SE/4 Section 6; NW/4 NW/4 (Lot 4), Section 5-22N-23W
- 2231 H. J. Schneider et al: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 7-22N-24W
- 2249 Freeman Morris et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4, Section 33-22N-26W
- 2256 Jennie White et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 400 acres being SE/4, E/2 SW/4, Lots 3 and 4, Section 18; W/2 SW/4 Section 17-22N-24W
- 2263 Ira Dolphus et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 440 acres being E/2 NW/4, S/2 NE/4, NW/4 SE/4, Section 19; SW/4, S/2 NW/4, Section 20-18N-22W
- 2265 Sarepta J. Huston: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 280 acres being W/2 NE/4, NE/4 NW/4, S/2 NW/4, N/2 SW/4, Section 25-18N-26W
- 2268 John R. Brown et ux: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under 400 acres being S/2 NE/4, Lots 1 and 2, Section 2-18N-26W; SE/4 NW/4, SW/4 NE/4, NW/4 SE/4, NE/4 SW/4, E/2 SE/4 Section 35-19N-26W
- 2530 Charles Bunn et ux: All interest in and to the oil, gas and other minerals in and under 440 acres being S/2 NE/4, SE/4 NW/4, S/2, Section 25-18N-24W
- 2583 Dickson Oil Royalty Company: An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 9-21N-28W
- 2584 Dickson Oil Royalty Company: An undivided $\frac{1}{4}$ interest in and to the oil, gas and other minerals in and under 160 acres being S/2 NE/4, SE/4 NW/4, NE/4 SW/4, Section 25-22N-26W

NON-PRODUCING LEASES GARFIELD COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5722	4- 2-56	J. A. Zaloudek, et ux	All interest in 158.66 acres being Lots 3 and 4, S/2 NW/4 Sec. 5-23N-7W.	195	221
5876	11-19-56	Jennie B. Kindt	All interest in 160 acres being SW/4 Sec. 23-24N-8W.	203	384
5877	12- 3-56	Ida Pearl Dowers, et al	All interest in 160 acres being NW/4 Sec. 15-24N-7W.	204	558
5878	12- 3-56	Ida Pearl Dowers, et al	All interest in 160 acres being SW/4 Sec. 15-24N-7W.	204	555
5879	12- 7-56	Winton E. Conner, et ux	All interest in 160 acres being NE/4 Sec. 19-24N-7W.	205	11
5914	1-23-57	Theodore A. Eggers, et ux	All interest in 160 acres being NW/4 Sec. 9-21N-5W.	206	4
5915	2-11-57	Martha H. Blake, et vir	All interest in 160 acres being SE/4 Sec. 27-22N-6W.	206	224
5952	2-12-57	Roberta Bass, et vir	All interest in 369.30 acres being N/2, & a tract of land containing 49.30 acres, more or less, being in N/2 SE/4 Sec. 15-22N-7W, as more particularly described in the lease.	207	568
6364	1-13-62	Mr. C. E. Butts, et ux	All interest in 80 acres being S/2 NE/4 Sec. 23-21N-3W.	252	221
6365	1-13-62	Mrs. Ferrol E. Butts, et vir	All interest in 134.50 acres being N/2 NE/4 Sec. 28; N/2 NW/4, less approx. 20 acres, Sec. 27-21N-3W.	252	219
6541	3-13-63	Charles Sebranek, et ux	½ interest in 160 acres being SW/4 Sec. 14-21N-4W.	264	453
6542	2- 2-63	Calla Mae Marvin, et vir	½ interest in 160 acres being NE/4 Sec. 23-21N-4W.	262	489
6543	5-15-63	Ernest A. Kaiser, et ux	½ interest in 80 acres being W/2 NW/4 Sec. 23-21N-4W.	266	219
6545	1-17-62	Elsie V. Rosenbaum, et vir	½ interest in 80 acres being S/2 SW/4 Sec. 23-21N-4W.	257	610
6547	2-26-62	Charlie E. Cutter, et ux	½ interest in 80 acres being W/2 NE/4 Sec. 27-21N-4W. Subject to 1/32 of 7/8 ORI	253	318

NON-PRODUCING LEASES GRADY COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5196	8-15-62	Joe D. Sims, et al	¾ interest in 160 acres being NW/4 Sec. 26-7N-8W.	738	233
	8-15-62	Aetna Life Insurance Company, a Corporation	¼ interest in 160 acres being NW/4 Sec. 26-7N-8W.	738	235

STATE OF OKLAHOMA COUNTY OF GRADY

NON-PRODUCING MINERALS

2090 E. B. Barton et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 71.80 acres being Lots 9, 10, 11, the North 1.75 acres and the Southeast 10 acres of Lot 12 Section 21-10N-5W

NON-PRODUCING LEASES GRANT COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
5380	12-20-63	Miles Meloslav Klina et ux	All interest in 160 acres being SE/4 Section 28-28N-4W	206	64
5554	12-13-54	Julia Woodring et al	¼ interest in 157 acres being Lots 6 & 7; E/2 SW/4 Section 6-28N-8W	134	340
5729	4-20-56	Eunice E. Spencer et vir	All interest in 123.50 acres being Lots 6 & 7; E/2 SW/4 South & West of CL of Pond Creek, Section 6-25N-3W	146	138
5731	4-30-56	H. H. McKee	All interest in 236.00 acres being SW/4, Section 6, North & East of CL of Pond Creek, W/2 SE/4, Lots 8 & 9, Section 6; Lots 7 & 8, Section 7, with all accretions and reparian rights thereto, 25N-3W	146	140
5923	2- 7-57	Ethel H. Shannon	All interest in 160 acres being NW/4, Section 32-25N-7W	153	186
5943	3- 6-57	Walter Waldie et ux	All interest in 80 acres being E/2 SW/4, Section 35-27N-5W	153	466
5974	3- 7-57	Clyde E. Hergert et al	All interest in 152.29 acres being Lots 1 & 2, E/2 NW/4, Section 19-25N-6W	154	527
5975	3- 7-57	Elmer R. Hergert et al	All interest in 96.69 acres being Lots 3 & N/4 Lot 4, NE/4 SW/4, N. 10 acres SE/4 SW/4 Section 19-25N-6W	154	532
5976	3- 7-57	Glenn L. Hergert et al	All interest in 58.44 acres being S ¼ Lot 4, South 30 acres SE/4 SW/4 Section 19-25N-6W	154	530
6666	4- 8-64	Cecil W. Haws, et ux	All interest in 160 acres being SE/4 Section 25-27N-5W	—	—
6671	3-31-64	Martha J. Cunningham	All interest in 155.80 acres being Lot 1, NE/4 SW/4, S/2 SW/4, with all accretions and reparian rights thereto, Section 5-25N-3W	—	—
6672	4-14-64	Sherman W. Griffin, a single man	All interest in 160 acres being SW/4 Section 25-27N-5W	210	618

NON-PRODUCING LEASES HARPER COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
5938	11- 6-56	The Federal Land Bank of Wichita	¾th interest in 240 acres being SE/4, E/2 SW/4, Section 4-25N-22W IM	100	358
5939	11- 6-56	The Federal Land Bank of Wichita	¾th interest in 160 acres being E/2 W/2, Section 9-25N-22W IM	100	361
6020	7-18-57	Clare W. Johnson	14/80ths interest in 80 acres being W/2 SW/4, Section 34-25N-23W	108	550
6139	6- 7-63	Hal Cooper et ux	½ interest in 160 acres being NW/4 Section 34-25N-22W	157	198
6155	1- 1-59	United States of America (NM-023827-Okla)	½ interest in 2816.46 acres being Section 19, East of Federal Hwy 183; S/2, NW/4 NW/4, NW/4 NE/4, S/2 NE/4, Section 20; N/2, Section 21; Section 29, East of Federal Hwy 183; Section 30, East of Federal Hwy 183; N/2 Section 32, East of Federal Hwy 183; W/2, less SW/4 SW/4; & W/2 E/2, & E/2 E/2, West of Public Road, Section 33-25N-22W	—	—
6585	4- 1-63	Anna J. Martin	All interest in 175.906 acres being S/2, Section 32-25N-22W; lying East of State Hwy No. 34 (US183)	156	280
6559	12-29-61	Scott W. Hovey et al	½ interest in 640 acres being Section 36-25N-23W	146	341

EXHIBIT A-2 — Page 32

**STATE OF OKLAHOMA
COUNTY OF HARPER**

NON-PRODUCING MINERALS

- 1720 C. A. Lynch: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being NE/4 Section 5-25N-23W.
- 1858 D. E. Beaty, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320 acres being SE/4 Section 14, SE/4 Section 22-25N-26W.
- 2066 J. E. O'Donnell: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320 acres being SE/4 SE/4 Section 8, NE/4 NE/4 Section 17, S/2 SW/4, NW/4 SE/4, W/2 NE/4, NE/4 NE/4 Section 9-27N-23W.
- 2067 Irving T. Honnold: An undivided $\frac{1}{2}$ interest in and to all oil, gas and other minerals in and under 40 acres being SW/4 SE/4 Section 9-27N-23W.
- 2102 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 156 acres, being NE/4 Section 17-28N-21W, except 4 acres deeded to Evangelical Lutheran Zions Church by Instrument recorded in Book 12 of Deeds, at page 329.
- 2103 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being Lots 3, 4, S/2 NW/4 Section 1-28N-22W.
- 2125 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 240 acres being S/2 NE/4, SE/4 Section 31-29N-21W.
- 2137 Thomas F. Shea: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being NE/4 Section 8-28N-21W.
- 2146 Kenneth O. Huff, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 320 acres being W/2 Section 28-28N-21W.
- 2147 Charles C. Crissup: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being NE/4 Section 21-27N-21W.
- 2150 William J. Zander, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being E/2 NW/4, W/2 NE/4 Section 25-27N-22W.
- 2154 John D. Wilson, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being SE/4 NW/4, E/2 SW/4, SW/4 SE/4 Section 4-27N-20W.
- 2169 J. O. Selman, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 169.21 Acres being Lots 4, 5, 6 and 7 Section 6-25N-21W.
- 2170 Robert G. Rogers, et ux: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 160 acres being NW/4 Section 23-29N-22W.
- 2362 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 1960.00 acres being S/2 SE/4 Section 15, S/2, NW/4 Section 22, all Section 26; E/2, SW/4 Section 27, E/2 NW/4, NW/4 NW/4, NE/4 Section 35-25N-22W.
- 2363 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under 3621.00 acres being S/2 NW/4, Section 15, all of Section 16, Lots 1, 2, E/2 NW/4, NE/4 Section 19, NW/4 NW/4, W/2 NE/4, SE/4 NE/4, SE/4 Section 20, NE/4 Section 21, all Section 29, all Section 31, N/2 Section 32, E/2 SW/4, NW/4, NW/4 SW/4, E/2 Section 33-25N-22W, except a tract of land containing 99.00 acres in the E/2 Section 33-25N-22W which was conveyed to Irish Syndicate Live Stock and Loan Company by Quit Claim Deed dated June 13, 1938, by and between H. F. Wilcox Oil and Gas Company, party of the first part, and Irish Syndicate Live Stock and Loan Company, party of the second part.

- 2364 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
4000.00 acres being S/2 Section 4, S/2 Section 5, all Section 8, NE/4, N/2 SE/4, N/2 NW/4, S/2 SW/4 Section 9, E/2 SW/4, W/2 SE/4 Section 10, NW/4, W/2 SW/4 Section 14, all of Sections 15, 16, and 17-25N-23W.
- 2365 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
3140.00 acres being all of Sections 20 and 21, W/2, E/2 SE/4, SW/4 SE/4, Section 22, NE/4, E/2 NW/4, NW/4 NW/4, N/2 SW/4 NW/4 Section 27, all Section 28, N/2, S/2 S/2 Section 29-25N-23W.
- 2366 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
3440.00 acres being E/2 SE/4 Section 14, all Section 23, E/2, SW/4 Section 24, all of Sections 25 and 26, NE/4, E/2 NW/4, NW/4 NW/4, NE/4 SE/4 Section 35, all Section 36-25N-23W.
- 3094 Irish Syndicate Live Stock and Loan Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
1440.00 acres being NW/4 Section 21, SW/4 Section 20, all Section 30-25N-22W, NW/4 Section 24-25N-23W, S/2 Section 19-25N-22W.

NON-PRODUCING LEASES HARMON COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6678	3-28-63	James F. Kromer, et ux	All interest in 1,120 acres being all of Section 3; N/2 & E/2 SW/4 & W/2 SE/4 of Section 10-5N-26W.	27	485
6679	4- 1-63	Walter E. Skaggs, et ux	$\frac{1}{2}$ interest in 40 acres being SW/4 NW/4 Section 1-5N-26W.	27	505
6680	3-28-63	W. S. Kromer, et ux	All interest in 360 acres being SE/4 SE/4 Section 10 & W/4 SW/4 Section 10; & N/2 NW/4 & N/2 NE/4 & SW/4 NE/4 & NW/4 SE/4 Section 15; $\frac{1}{2}$ interest in 40 acres being NE/4 NE/4 Section 21, all in 5N-26W.	27	439
6681	3-28-63	Walter E. Skaggs, et ux	All interest in 320 acres being W/2 & SW/4 SE/4 Section 35-6N-26W; all interest in 40 acres being NE/4 NE/4 Section 2-5N-26W; $\frac{1}{2}$ interest in 80 acres being N/2 NW/4 Section 1-5N-26W.	27	437

**NON-PRODUCING LEASES
HASKELL COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5898	1-15-57	J. W. Banker, et ux	All interest in 160.00 acres being NE/4 Sec. 20-7N-22E.	173	229
5899	1- 8-57	East Oklahoma Royalties, Inc., et al	All interest in 212.50 acres being SE/4, SE/4 SW/4, E/2 E/2 SW/4 SW/4, NW/4 NE/4 SW/4 SW/4 Sec. 25-8N-20E.	173	231
5900	1- 9-57	W. J. Martin, et al	½ interest in 160.00 acres being SE/4 Sec. 31-8N-21E.	178	238
	1- 9-57	Carl K. Rose, et al	½ interest in 160.00 acres being SE/4 Sec. 31-8N-21E.	173	235
5901	1- 8-57	Helen L. Williams	160/380 interest in 380.00 acres being W/2 NE/4, NW/4, W/2 NE/4 SW/4, SE/4 SW/4, W/2 SW/4 Sec. 36, All interest in 185.00 acres being NW/4 NW/4 NE/4, W/2 NE/4 NW/4 NE/4, NE/4 SE/4, E/2 NW/4 SE/4, N/2 SE/4 SE/4, SW/4 SE/4 SE/4, S/2 SW/4 SE/4, W/2 SE/4 SW/4, SW/4 SW/4 Sec. 35-8N-22E.	173	237
5902	1- 8-57	Tom Bailes, et ux	All interest in 240.00 acres being SW/4, W/2 SE/4 Sec. 33-9N-21E.	173	239
5903	1-14-57	Wendell Bonham, et ux	All interest in 149.50 acres being S/2 S/2 less 10.50 acres in SE/4 SE/4, all being in Sec. 12-9N-22E.	173	241
5904	1-14-57	Samuel N. Kennon	All interest in E/2 NW/4 NW/4 SW/4, NE/4 NW/4 SW/4, S/2 NW/4 SW/4, NE/4 SW/4, S/2 SW/4 Sec. 25, NW/4 Sec. 36-10N-20E.	178	243
5905	1-14-57	Louis Foitek, et ux	All interest in 480.00 acres being NW/4 Sec. 15, N/2 Sec. 16-10N-21E.	173	245
5906	1-11-57	Lee H. Tyler, et ux	All interest in 210.00 acres being S/2 NE/4, W/2 SE/4, W/2 SE/4 SE/4, NE/4 NE/4 SE/4 Sec. 13-10N-22E.	173	247
5907	1-11-57	Lee H. Tyler, et ux	All interest in 190.00 acres being NW/4, N/2 NW/4 SW/4, SW/4 NW/4 SW/4 Sec. 13-10N-22E.	173	249
5908	1- -8-57	Carl K. Rose, et al	All interest in 170.00 acres being S/2 NW/4, SE/4 SW/4, S/2 NE/4 SW/4, W/2 SW/4 SE/4, SW/4 NW/4 SE/4 Sec. 1-10N-22E.	173	251
5909	1- 8-57	Carl K. Rose, et al	½ interest in 160.00 acres being SE/4 Sec. 35, all interest in 120.00 acres being N/2 SW/4, SW/4 SW/4 Sec. 36-11N-22E.	173	253
	1- 8-57	The Federal Land Bank of Wichita	½ interest in 160.00 acres being SE/4 Sec. 35-11N-22E.	177	224
5910	1- 8-57	Jack Rose and Carl K. Rose, Trustees, et al	All interest in 357.89 acres being Lots 1, 2, 3, 4, S/2 NE/4 Sec. 1-10N-22E, W/2 SE/4, SE/4 SW/4 Sec. 36-11N-22E.	173	255
5911	1- 8-57	Jack Rose and Carl K. Rose, Trustees	All interest in 404.74 acres being W/2 SE/4, S/2 NW/4, SW/4 NE/4 Sec. 12, all that part of SE/4 Sec. 11 lying north of south line of Midland Valley R.R. R/W and all that part SW/4 Sec. 12 lying north of south line of Midland Valley R.R. R/W, all being in 9N-20E.	173	257

EXHIBIT A-2 — Page 35

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
5912	1- 8-57	East Oklahoma Royalties, Inc., et al	13/16 interest in 580.00 acres being E/2 SE/4, NW/4 SE/4, NE/4 SW/4 SE/4 Sec. 10, SW/4 Sec. 11, SW/4, E/2 NW/4, SW/4 NW/4, SE/4 NW/4 NW/4 Sec. 14-11N-21E.	173	259
	1- 8-57	Zelah Campbell, et al	3/16 interest in 580.00 acres being E/2 SE/4, NW/4 SE/4, NE/4 SW/4 SE/4 Sec. 10, SW/4 Sec. 11, SW/4, E/2 NW/4 SW/4 NW/4, SE/4 NW/4 NW/4 Sec. 14-11N-21E.	173	261
6409	1-12-57	Lynn May et ux	All interest in 80.00 acres being N/2 SE/4 Section 26-8N-22E	174	357
6410	1-18-57	Hugh D. Brown et ux	All interest in 80.00 acres being Lot 2, SW/4 NE/4 Section 1-7N-22E	174	369
	1-18-57	R. T. Shaw et ux	All interest in 80.00 acres being Lot 2, SW/4 NE/4 Section 1-7N-22E	175	307

NON-PRODUCING LEASES HUGHES COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6186	5-19-58	Mrs. Letha L. Reed et ux	51/60th interest in 60 acres being S/2 SE/4 SE/4 Section 24; NE/4 NE/4, Section 25-5N-11E	281	278
	6-23-59	G. G. Jones et al	8.4/60ths interest in 60 acres being S/2 SE/4 SE/4 Section 24 and NE/4 NE/4 Section 25-5N-11E	296MS	167
The above leases subject to Gas Purchase Contract dated July 18, 1960 between Oklahoma Natural Gas Company, as Buyer, and Wilcox Oil Company, as Seller.					
6665	3-31-64	Lottie Loftis et vir	All interest in 183.30 acres being Lots 1 & 2, S/2 NE/4, E/2 SE/4 NW/4. Section 1-4N-11E	362	301
6667	4- 2-64	Paul Balingier, et al	All interest in 170 acres being NW/4, SW/4 SW/4 NE/4 Section 25-4N-10E	MS362	425
6669	4-22-64	Jim Shirley et ux	1/6th interest in 50 acres being NW/4 NW/4, NW/4 NE/4 NW/4, Section 15-4N-11E		
6673	4-28-64	The State of Oklahoma	All Interest in 100 acres being S/2 SW/4 NW/4 & W/2 SW/4 Section 5-4N-10E	—	—
6675	3-31-64	Harry S. Medford, et ux	½ Interest in 80 acres being S/2 SE/4 Section 1-4N-11E	364	184
	5-19-64	Byron C. Eppler, et ux	1/18 interest in 90 acres being W/2 NW/4 and NW/4 NE/4 NW/4 Section 15-4N-11E.		
	5-22-64	Chas. A. Neal & Company	2/9 interest in 90 acres being W/2 NW/4 and NW/4 NE/4 NW/4 Section 15-4N-11E.		
	5-26-64	Dema E. Smith	75/900 interest in 90 acres being W/2 NW/4 and NW/4 NE/4 NW/4 Section 15-4N-11E.		
	5-27-64	Bryce Ballinger	5/90 interest in 90 acres being W/2 NW/4 and NW/4 NE/4 NW/4 Section 15-4N-11E.		
	5-27-64	O. H. Miller	5/90 interest in 90 acres being W/2 NW/4 and NW/4 NE/4 NW/4 Section 15-4N-11E.		
	5-20-64	C. L. Barnard, et ux	½ interest in 80 acres being N/2 SE/4 Section 1-4N-11E.		
	5-19-64	R. R. Horn, et ux	1/16 interest in 80 acres being N/2 SE/4 Section 1-4N-11E.		
	8-31-64	Jim Shirley, et ux	¾ interest in 80 acres being N/2 SE/4 Section 1-4N-11E.		

EXHIBIT A-2 — Page 36

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
5-20-64		Rosa Jarrett	1/16 interest in 240 acres being SW/4 and N/2 SE/4 Section 1-4N-11E.		
3-31-64		Juanita Daniel, et vir	1/24 interest in 240 acres being SW/4 and N/2 SE/4 Section 1-4N-11E.		
3-31-64		Helen Shirley Whitley, et vir	1/24 interest in 240 acres being SW/4 and N/2 SE/4 Section 1-4N-11E.		
6- 1-64		Jess Harris, Jr., et al	1/16 interest in 180 acres being SW/4 Section 1-4N-11E.		
5-20-64		Charles Kirk, et ux	1/8 interest in 160 acres being SW/4 Section 1-4N-11E.		
5-19-64		Binas Hostettler	1/8 interest in 160 acres being SW/4 Section 1-4N-11E.		
3-31-64		Jim Shirley, et ux	5/12 interest in 160 acres being SW/4 Section 1-4N-11E.		

**STATE OF OKLAHOMA
COUNTY OF HUGHES**

NON-PRODUCING MINERALS

- 1164 Floyd O. Howarth Oil and Gas Company: An undivided 1/4 interest in and to the oil, gas and other minerals in and under
160 acres being SE/4 Section 20-8N-10E.
- 3857 John E. Turner, et ux: An undivided 24/160 interest in and to the oil, gas and other minerals in and under
160 acres being SE/4 Section 28-9N-9E.

**STATE OF OKLAHOMA
COUNTY OF KAY**

NON-PRODUCING MINERALS

- 2585 Dickson Oil Royalty Company: An undivided 1/80 interest in and to the oil, gas and other minerals in and under
40 acres being SE/4 NE/4 Section 34-25N-1W.
- 2586 Dickson Oil Royalty Company: An undivided 1/960 interest in and to the oil, gas and other minerals in and under
160 acres being NW/4 Section 34-25N-1W.

**NON-PRODUCING LEASES
KINGFISHER COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5978	8- 8-57	R. A. Frakes, et ux	All interest in 160 acres being NW/4 Section 10-16N-7W	165	589
5979	8- 8-57	Wilford Snethen, et ux	All interest in 160 acres being SE/4 Section 8-16N-7W	165	591
6019	8- 3-57	Peter Yost, et ux	All interest in 160 acres being SW/4 Section 20-16N-8W	169	614
6338	7-12-61	State of Oklahoma (Ls. No. 87-CS-8943)	4.22768% interest in 160 acres being NE/4 Section 36-19N-9W	—	—
6617	12-17-58	G. L. Carey	3.9607900% interest in 160 acres being SW/4 Section 17-18N-5W, I.M., Subj. to 1/16 of 7/8 O. R. I.	180	9
6618	4-14-63	Joe O. Kochenower, et ux	3.96079% interest in 160 acres being SE/4 Section 36-17N-9W, I.M., Subj. to 1/16 of 7/8 O. R. I.	246	460
6650	1-15-64	Thurman L. Hayes, et ux	40% interest in 1.00 acre, more or less, being in the SE/4 SW/4 Section 10-16N- 7W, as more particularly described in lease.	258	147
6651	2- 4-64	Minnie Mae Toulson	40% interest in 8.00 acres being in SE/4 SW/4 Section 10-16N-7W, as more partic- ularly described in lease.	259	125
6652	1-14-64	Elmer S. Boyd, et al	40% interest in 4.25 acres being in SE/4 SW/4 Section 10-16N-7W, more partic- ularly described in lease.	259	127
6653	1-13-64	Sylvan E. Frederick, et ux	40% interest in 0.75 acres, more or less, being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	259	130
6654	1-22-64	Andrew L. Sage, et ux	40% interest in 5/8ths acre, more or less, being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	259	132
6655	1-14-64	George H. Glessner, et ux	40% interest in 1.00 acre, more or less, being in SE/4 SW/4 Section 10-16N-7W, as more particularly described in lease.	259	134
6656	1-22-64	Mearline Bates	40% interest in 13.43 acres being in SE/4 SW/4 Section 10-16N-7W, as more partic- ularly described in lease.	258	138
6657	1-15-64	Charles L. Hobbs, et ux	40% interest in 2.50 acres being in SE/4 SW/4 Section 10-16N-7W, as more partic- ularly described in lease.	258	140
6658	1-21-64	Marjorie Ruth Lietzke, et vir	40% interest in 3.00 acres being in SE/4 SW/4 Section 10-16N-7W, as more partic- ularly described in lease.	258	142
6659	1-22-64	Earnest Burnett, et ux	40% interest in 3.75 acres being in SE/4 SW/4 Section 10-16N-7W, as more partic- ularly described in lease.	258	144

**NON-PRODUCING LEASES
KIOWA COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6244	6-14-60	Department of Interior Bureau of Indian Affairs (Contract No. 14-20-206-18266)	All interest in 160 acres being SW/4 Section 1-7N-14W	380	449

**NON-PRODUCING LEASES
LEFLORE COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6411	1-25-57	C. H. Barry et ux	½ interest in 120 acres being N/2 SE/4 & SE/4 SE/4 Section 31-8N-23E	340	583

**NON-PRODUCING LEASES
LINCOLN COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
1552	7-10-26	J. B. Angel et ux	All interest in 80 acres being W/2 SW/4 Section 35-14N-6E	72	185
5399	8- 3-52	W. Eugene Springer	5/16 interest in 80 acres being N/2 SW/4 Section 10-15N-4E, Subject to 5/16 of 1/8 of 7/8 ORI	200	326

**STATE OF OKLAHOMA
COUNTY OF LINCOLN**

NON-PRODUCING MINERALS

2330 J. J. Lancaster: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 7-13N-2E.

2525 George G. Travis: An undivided ¾ interest in and to the oil, gas and other minerals in and under 80 acres being N/2 NE/4 Section 14-12N-8E.

3320 Martha Murphy: An undivided 1/16 interest in and to the oil, gas and other minerals in and under 80 acres being E/2 NW/4 Section 18-14N-6E.

5253 C. M. Cade, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 80 acres being N/2 SW/4 Section 4-12N-3E.

**STATE OF OKLAHOMA
COUNTY OF LOGAN**

NON-PRODUCING MINERALS

2155 H. F. Elsey et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 80 acres being E/2 SW/4, Section 2-15N-1E I.M.

2560 Glen C. Ault et ux: An undivided 1/5 interest in and to the oil, gas and other minerals in and under 160 acres being W/2 SW/4 Section 17; W/2 SE/4 Section 18-17N-4W

NON-PRODUCING LEASES MAJOR COUNTY, OKLAHOMA

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5033	10-26-61	James Petroleum Corp.	¼ interest in 160 acres being NE/4 Section 16-20N-16W	228	227
	10-30-61	Elmer R. Livingston	1/16 interest in 160 acres being NE/4 Section 16-20N-16W	228	231
	10-24-61	A. Pepis	1/16 interest in 160 acres being NE/4 Section 16-20N-16W	228	229
	11-22-61	H. A. Horwitz	18/160 interest in 160 acres being NE/4 Section 16-20N-16W	228	233
	11- 3-61	Julius Horwitz	7/160 interest in 160 acres being NE/4 Section 16-20N-16W	228	235
5481	10-20-65	Jonathan H. Smith et ux	All interest in 160 acres being NE/4 Section 22-21N-13W	156	319
5537	9-28-54	Elden K. Barnum et ux	All interest in 160 acres being SE/4 Section 16; an undivided ½ interest in 160 acres being W/2 W/2 Section 20-22N-13W	156	53
5621	7-11-55	Jessee E. Howard et ux	All interest in 160 acres being SW/4 Section 27-23N-12W	160	349
5960	3- 2-57	Ethel M. Fahey et vir	All interest in 160 acres being NE/4 Section 18-20N-9W I.M.	179	385
5963	3- 4-57	Harvey B. Hammer et ux	All interest in 370 acres being S/2, NE/4 South & East of RR R/W, Section 12-20N-10W I.M.	179	549
5484	10-22-54	J. C. Abbott et ux	All interest in 160 acres being SE/4 Section 2-21N-13W	156	389

STATE OF OKLAHOMA COUNTY OF MAJOR

NON-PRODUCING MINERALS

- 1717 C Hudspeth: An undivided ½ interest in and to the oil, gas and other minerals in and under 161.10 acres being Lot 2 Section 10; N/2 NE/4 Section 15; NW/4 NW/4 Section 14-22N-13W.
- 1718 S. D. McReynolds: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SW/4 Section 2-20N-15W.
- 2167 C. A. Lynch: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 25-23N-11W.
- 2175 Thomas R. Libby, et ux: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 36-23N-11W.
- 2553 W. H. Cobbs: An undivided ½ interest in and to the oil, gas and other minerals in and under 160 acres being W/2 NE/4, W/2 SE/4 Section 26-20N-15W

STATE OF OKLAHOMA COUNTY OF McINTOSH

NON-PRODUCING MINERALS

- 2587 Dickson Oil Royalty Company: An undivided ½ interest in and to the oil, gas and other minerals in and under 80 acres being W/2 NW/4 Section 30-9N-14E

EXHIBIT A-2—Page 40

**STATE OF OKLAHOMA
COUNTY OF NOBLE**

NON-PRODUCING MINERALS

- 2590 Dickson Oil Royalty Company: An undivided 11088/257400 interest in and to the oil, gas and other minerals in and under
160 acres being SE/4 Section 2-24N-1W.
- 2589 Dickson Oil Royalty Company: An undivided 1/39 interest in and to the oil, gas and other minerals in and under
160 acres being SW/4 Section 2-24N-1W.

**NON-PRODUCING LEASES
OKFUSKEE COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
8856	4- 5-19	Shawnee Severs #38772 I27 ind. 2352	All interest in 40 acres being SE/4 NW/4 Section 31-11N-10E	B-50	666

**STATE OF OKLAHOMA
COUNTY OF OKFUSKEE**

NON-PRODUCING MINERALS

- 1222 Floyd O. Howart Oil and Gas Company: An undivided ¼ interest in and to the oil, gas and other minerals in and under
100 acres being S/2 SW/4 SW/4 Section 4; W/2 NW/4 Section 9-12N-9E.
- 1234 Floyd O. Howart Oil and Gas Company: An undivided ¼ interest in and to the oil, gas and other minerals in and under
80 acres being W/2 SE/4 Section 15-18N-10E.
- 2591 Dickson Oil Royalty Company: An undivided 1/10 interest in and to the oil, gas and other minerals in and under
40 acres being NW/4 NW/4 Section 26-18N-10E.
- 2592 Dickson Oil Royalty Company: An undivided 7/320 interest in and to the oil, gas and other minerals in and under
160 acres being S/2 SE/4 Section 22; N/2 NE/4 Section 27-18N-10E.
- 6620 Dorcas F. Chapman, et vir: A full interest in and to the oil, gas and other minerals in and under
40 acres being SW/4 SE/4 Section 25-10N-9E.

**NON-PRODUCING LEASES
OKMULGEE COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
13	3- 5-18	Peter Coleman, et ux	All interest in 80 acres being W/2 SE/4 Section 34-15N-11E	M139	423

**STATE OF OKLAHOMA
COUNTY OF OKMULGEE**

NON-PRODUCING MINERALS

- 2593 Dickson Oil Royalty Company: An undivided 1/40 interest in and to all the oil, gas and other minerals in and under
40 acres, being E/2 E/2 SW/4 Section 21-14N-11E

**STATE OF OKLAHOMA
COUNTY OF PAWNEE**

NON-PRODUCING MINERALS

- 2596 Dickson Oil Royalty Company: An undivided 3/320 interest in and to all of the oil, gas and other minerals in and under
120 acres being N/2 SE/4 & SW/4 SE/4 Section 26-20N-6 E

**STATE OF OKLAHOMA
COUNTY OF PAYNE**

NON-PRODUCING MINERALS

- 2536 Martha E. Stage: An undivided 1/32 interest in and to all of the oil, gas and other minerals in and under
160 acres being SW/4 Section 8-19N-1W
- 3866 Dick Ross: An undivided 15/120 interest in and to all of the oil, gas and other minerals in and under
120 acres being S/2 SW/4 and NE/4 SW/4 Section 29-19N-6E

**STATE OF OKLAHOMA
COUNTY OF POTTAWATOMIE**

NON-PRODUCING MINERALS

- 980 L. Medlin: An undivided 1/16 interest in and to all of the oil, gas and other minerals in and under
160 acres being E/2 NE/4 Section 7 and W/2 NW/4 of Section 8-8N-3E
- 996 J. C. Cooke Oil & Gas Co.: An undivided 1/2 interest in and to all of the oil, gas, coal and other minerals in and under
160 acres being NW/4 Section 21-11N-5E
- 1631 J. J. Lancaster: An undivided 3/32 interest in and to all of the oil, gas and other minerals in and under
160 acres being NW/4 of Section 17-9N-5E
- 2528 Geo. M. McDaniel: An undivided 1/16 interest in and to all of the oil, gas and other minerals in and under
80 acres being N/2 NE/4 Section 22-6N-3E
- 2604 Dickson Oil Royalty Company: An undivided 1/320 interest in and to all of the oil, gas and other minerals in and under
160 acres being all of the SE/4 Section 17-8N-5E
- 2606 Dickson Oil Royalty Company: An undivided 3/40 interest in and to all of the oil, gas and other minerals in and under
The North 53 1/2 acres of the W/2 SW/4 Section 12-8N-4E
- 2607 Dickson Oil Royalty Company: An undivided 3/320 interest in and to all of the oil, gas and other minerals in and under
160 acres, being all of the NW/4 Section 32-8N-4E
- 2608 Dickson Oil Royalty Company: An undivided 3/160 interest in and to all of the oil, gas and other minerals in and under
26 1/2 acres being the South 26 1/2 acres of W/2 SW/4 Section 12-8N-4E
- 2609 Dickson Oil Royalty Company: An undivided 1/48 interest in and to all of the oil, gas and other minerals in and under
60 acres being SW/4 NW/4 and W/2 SE/4 NW/4 Section 4-8N-4E
- 2610 Dickson Oil Royalty Company: An undivided 1/50 interest in and to all of the oil, gas and other minerals in and under
100 acres being NW/4 SE/4, SW/4 NE/4 and S/2 SE/4 NE/4 Section 31-9N-4E
- 4948 Hazel A. Smallhorn: An undivided 1/160 interest in and to all of the oil, gas and other minerals in and under
80 acres being N/2 NW/4 Section 23-6N-3E
- 5159 Jack W. Page: An undivided 1/320 interest in and to all of the oil, gas and other minerals in and under
160 acres being SE/4 Section 8-8N-5E
- 5202 L. O. Carter Oil Company: An undivided 3/160 interest in and to all of the oil, gas and other minerals in and under
160 acres being SE/4 Section 17-7N-3E

EXHIBIT A-2—Page 42

**NON-PRODUCING LEASES
ROGER MILLS COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6030	7-19-57	Apple Woman (Contract #14-20-205-1305)	All interest in 160 acres being SE/4 Sec- tion 26-14N-21W	81	35
6070	7-19-57	Jonathan Red Bird et al (Contract #14-20-205-1306)	All interest in 160 acres being SE/4 Sec- tion 88-14N-21W	—	—
6122	4- 9-58	L. O. Robinson et al	All interest in 558.50 acres being N/2, SW/4, N/2 SE/4, except 1.50 acres in NW/4 SW/4 SW/4 and 1/4 interest 80.00 acres being S/2 SE/4, Section 25-18N-22W	21	149
	10-11-68	Maye E. Harrison	1/4 interest in 80 acres being S/2 SE/4 Section 25-18N-22W	58	566

**STATE OF OKLAHOMA
COUNTY OF ROGER MILLS**

NON-PRODUCING MINERALS

- 2236 L. L. Cheever: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 151.66 acres being Lot 8, Section 6; Lot 1, Section 7-16N-24W I.M.; N/2 NE/4 Section 12-16N-25W I.M.
- 2250 A. G. Gray: An undivided 1/2 interest in the oil, gas and other minerals in and under 80 acres being E/2 SE/4 Section 10-16N-26W I.M.
- 2259 Edd Parvin et ux: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being S/2 NW/4, N/2 SW/4 Section 10-16N-22W
- 2271 J. W. Dutton: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 400 acres being NE/4, N/2 SE/4, E/2 NW/4, SW/4 NW/4, NW/4 SW/4 Section 22-18N-23W I.M.
- 2282 A. G. Gray: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 SE/4, less 0.50 acre along West side, Section 3; N/2 NE/4, SW/4 NE/4, Section 15-15N-23W I. M.
- 2314 A. G. Gray: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being S/2 SW/4 Section 17; N/2 NW/4 Section 20-16N-26W I.M.
- 2315 J. L. King et ux: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 Section 85-15N-25W I.M.
- 2328 E. E. Davenport: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being W/2 NE/4, SE/4 NE/4, NE/4 NW/4, Section 28-15N-22W
- 2329 E. E. Davenport: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being SE/4 NW/4, N/2 SW/4, SE/4 SW/4 Section 28-15N-22W
- 2350 E. E. Davenport: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being NW/4 Section 28-16N-26W
- 2397 Louisa Keller et vir: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 400 acres being W/2, SW/4 SE/4, Section 26; NE/4 NE/4 Section 27-16N-26W I.M.
- 2455 F. P. Thorne, et ux: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 240 acres being W/2 NW/4, Section 3; E/2 NE/4 Section 4; N/2 SW/4 Section 19-15N-21W
- 2550 W. H. Cobbs: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being NE/4 Section 15-16N-26W
- 2625 Dickson Oil Royalty Company: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 160 acres being Lot 4, Section 2; Lot 1, Section 8-14N-22W; S/2 SW/4, Section 35-15N-22W
- 2626 Dickson Oil Royalty Company: An undivided 1/2 interest in and to the oil, gas and other minerals in and under 120 acres being S/2 NE/4, NE/4 SE/4 Section 23-15N-22W

EXHIBIT A-2—Page 43

- 2627 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
160 acres being N/2 SW/4 Section 7-14N-21W; E/2 SE/4 Section 12-14N-22W
- 2628 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
160 acres being SW/4 Section 34-15N-21W
- 2629 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to the oil, gas and other minerals in and under
40 acres being NW/4 NW/4 Section 14-14N-21W

**STATE OF OKLAHOMA
COUNTY OF SEMINOLE**

NON-PRODUCING MINERALS

- 2615 Dickson Oil Royalty Company: An undivided $\frac{1}{80}$ interest in and to all the oil, gas and other minerals in and under
80.00 acres being E/2 SE/4 Section 24-8N-5E
- 979 L. Medlen: An undivided $\frac{1}{24}$ interest in and to all the oil, gas and other minerals in and under
120.00 acres being N/2 NE/4, SW/4 NE/4 Section 25-9N-5E
- 2614 Dickson Oil Royalty Company: An undivided $\frac{1}{120}$ interest in and to all the oil, gas and other minerals in and under
120.00 acres being S/2 SW/4, NE/4 SW/4 Section 11-8N-5E

**STATE OF OKLAHOMA
COUNTY OF STEPHENS**

NON-PRODUCING MINERALS

- 930 J. C. Cooke Oil & Gas Co.: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under
153.21 acres being Lots 3, 4, E/2 SW/4 Section 19-2S-4W
- 946 J. C. Cooke Oil & Gas Co.: An undivided $\frac{1}{4}$ interest in and to all the oil, gas and other minerals in and under
40.00 acres being NW/4 SE/4 Section 5-3S-4W

**NON-PRODUCING LEASES
WASHITA COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
6044	7- 5-57	Marybelle (Curtis) Lone Bear — Contract 14-20-205-1230	All interest in 160.00 acres being SE/4 Sec. 3-11N-17W.	305	257
6190	10- 8-59	M. A. Prichard, et ux	All interest in 80.00 acres being E/2 NE/4 and ½ interest in 80.00 acres being W/2 NE/4 Sec. 33-8N-15W.	305	445
6193	10- 8-59	Preston A. Godfrey, et ux	All interest in 240.00 acres being SW/4 Sec. 27, E/2 SE/4 Sec. 28-8N-15W.	305	443
6229	5-17-60	Bret Record, et ux	All interest in 160.00 acres being SE/4 Sec. 21-8N-15W.	305	455
6230	5-18-60	R. M. Kobs, et al	All interest in 160.00 acres being SE/4 Sec. 33-9N-15W.	305	461
6231	5-18-60	R. M. Kobs, et al	½ interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	457
	5-18-60	E. M. Bradbury, et ux	1/6 interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	471
	5-18-60	Gladys L. Butterfield, et vir	1/6 interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	467
	5-18-60	Margaret E. Daniels	1/6 interest in 160.00 acres being NE/4 Sec. 20-8N-15W.	305	469
6250	6-22-60	Fred Wheeler, et al	All interest in 145.60 acres being Lot 5 in NW/4, Lot 1 in SE/4, Lot 4 in SW/4 Sec. 35-8N-14W.	305	263
6258	6-22-60	Flora Satepeahaw, et al Contract 14-20-0206-18271	All interest in 162.55 acres being Lot 1 of SE/4 Sec. 34, Lots 3, 4, 5, 6, SW/4 SW/4 Sec. 35-8N-14W.	305	265
6263	7-28-60	James E. Derryberry, et ux	All interest in 160.00 acres being S/2 SW/4, W/2 SE/4 Sec. 16-8N-14W.	307	619
6268	9-10-60	Harvey Schmidt, et al	All interest in 160.00 acres being SW/4 Sec. 8-8N-14W.	307	623
6269	9- 6-60	L. B. Weidenmaier, et ux	½ interest in 160.00 acres being SW/4 Sec. 22-8N-14W.	315	251
6275	3-19-60	Prudie Two Crows — Contract #14-20-205-2222	All interest in 160.00 acres being NE/4 Sec. 19-10N-16W.	305	261
6277	1-18-61	Charlie McCornack, Jr., et ux	All interest in 80.00 acres being E/2 NE/4 Sec. 31-9N-15W.	305	485
6283	1-18-61	Minnie Lee Harrison	All interest in 80.00 acres being N/2 NE/4 Sec. 30-9N-15W.	305	489
4550	6-19-58	Carl F. Kayser, et ux	All interest in 160.00 acres being SE/4 Sec. 14-11N-17W.	298	41
4551	6- 9-58	Eddie H. Kayser	All interest in 320.00 acres being W/2 Sec. 22-11N-17W.	298	39
4590	9-24-58	George W. Reimer, et ux	All interest in 160.00 acres being SE/4 Sec. 23-11N-16W.	298	59
4591	9-23-58	Henry J. Vogt, et ux	All interest in 160.00 acres being SW/4 Sec. 26-10N-15W.	298	57
4596	9-24-58	George W. Reimer, et ux	All interest in 160.00 acres being NE/4 Sec. 17-11N-16W.	298	55

EXHIBIT A-2—Page 45

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
4731	5-17-60	Ollie Nix, et vir	All interest in 80.00 acres being E/2 SW/4 Sec. 28-9N-14W.	305	463
	5-17-60	Bessie Fletcher, et vir	All interest in 80.00 acres being W/2 SW/4 Sec. 28-9N-14W.	305	465
5050	10- 8-59	Maud Chappellear	All interest in 160.00 acres being NW/4 Sec. 1-8N-16W.	305	433
5063	2-13-61	Emil Gamschlich	All interest in 240.00 acres being S/2 SE/4, SW/4 Sec. 4-10N-18W.	305	497
5064	1-10-61	Charlie McCornack, Jr., et ux	All interest in 80.00 acres being S/2 NE/4 Sec. 30-9N-15W.	305	477
5069	2-14-61	Margaret Horn	All interest in 160.00 acres being SW/4 Sec. 17-9N-16W.	305	505
5070	1-10-61	Charlie Maupin	½ interest in 80.00 acres being W/2 NE/4 Sec. 18-9N-15W.	305	481
5072	1-13-61	Leo George Vogt, et ux	All interest in 80.00 acres being W/2 SE/4, ¼ interest in 80.00 acres being E/2 SW/4 Sec. 11-9N-15W.	305	491
5079	1-10-61	Charlie Maupin	½ interest in 157.64 acres being Lots 1, 2, E/2 NW/4 (NW/4) Sec. 18-9N-15W.	305	479
5080	10- 8-59	Albert W. Cooper, et ux	All interest in 80.00 acres being E/2 SE/4 Sec. 11-8N-15W.	305	435
5081	2-14-61	O. L. Megli, et ux	All interest in 80.00 acres being S/2 NE/4 Sec. 14-11N-14W.	305	501
5082	2-14-61	O. L. Megli, et ux	All interest in 160.00 acres being SE/4 Sec. 14-11N-14W.	305	495
5087	1-10-61	J. M. Price, et ux	All interest in 160.00 acres being SE/4 Sec. 20-9N-15W.	305	475
5094	1-10-61	Barney L. Brence, et ux	All interest in 160.00 acres being NW/4 Sec. 20-9N-15W.	305	487
5110	10- 6-59	Lester A. Richey, et ux	All interest in 308.45 acres being Lots 1, 2, E/2 NW/4, NE/4 Sec. 7-8N-15W.	305	453
5111	1-12-61	Ed Huebert, et ux	All interest in 160.00 acres being SW/4 Sec. 29-10N-15W.	305	473
5174	2-14-61	Edward Mulder, et al	All interest in 160.00 acres being Lots 3, 4, S/2 NW/4 Sec. 1-9N-14W.	305	493
5175	2-14-61	Cora Mae Bennett Stratton, et al	All interest in 160.00 acres being SE/4 Sec. 1-9N-14W.	305	499
5177	10- 6-59	Edd J. Mandrell, et ux	All interest in 80.00 acres being S/2 NW/4 Sec. 12-8N-15W.	305	441
5289	1- 9-63	Alfred Stehr, et ux	All interest in 160.00 acres being NW/4 Sec. 13-11N-17W.	305	511
6010	6-28-57	John Bergen, et ux	All interest in 160.00 acres being NE/4 Sec. 1-11N-15W.	289	67
6036	7- 5-57	Standing Woman Contract 14-20-205-1228	All interest in 72.90 acres being Lots 6 & 7 in SW/4 Sec. 6-11N-16W.	—	—
6037	7- 5-57	Walking Ahead Contract 14-20-205-1227	All interest in 92.95 acres being W/2 W/2 Lot 3, W/2 W/2 SE/4 NW/4 & Lots 4, 5 of NW/4 Sec. 6-11N-16W.	—	—
5071	1-10-61	William W. Maupine et ux	½ interest in 80 acres being E/2 NE/4 Section 18-9N-15W.	305	483

EXHIBIT A-2 — Page 46

**STATE OF OKLAHOMA
COUNTY OF WASHITA**

NON-PRODUCING MINERALS

2618 Dickson Oil Royalty Company: An undivided $\frac{1}{2}$ interest in and to all the oil, gas and other minerals in and under

160.00 acres being NW/4 Section 14-11N-16W

**NON-PRODUCING LEASES
WOODS COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5317	8-28-63	Hazel Edna Pfleider, et vir	All interest in 160 acres being SE/4 Section 27-29N-14W	229	505
5824	10- 3-62	Neva Fern Wilhite, et vir	All interest in 127.30 acres being Lots 3 & 4, S/2 NW/4 Section 16-29N-14W	219	220
5855	8-29-63	Pearl Hood, et al	All interest in 160 acres being NE/4 Section 2-28N-14W	230	45
5356	8-29-63	Alvin W. Sternberger	All interest in 160 acres being NE/4 Section 10-28N-14W	230	12
5628	7-14-55	Nora L. Laycox, et al	All interest in 80 acres being N/2 SE/4 Section 11-24N-15W	151	193
5629	7-14-55	Julia P. Krobb, et vir	All interest in 80 acres being S/2 SE/4 Section 11-24N-15W	151	195
5630	7-13-55	John A. Hall, et ux	All interest in 160 acres being SW/4 Section 3-27N-15W	151	197
5632	7-13-55	Isaac Jaekel, et ux	All interest in 160 acres being SE/4 Section 24-27N-15W	151	190
5635	7-14-55	Alta B. McCann, et al	All interest in 160 acres being S/2 SW/4 Section 24; W/2 NW/4 Section 25-24N-15W	151	256
5636	8-12-57	John H. Hull, et ux	All interest in 280 acres being N/2 SW/4 Section 35-24N-15W, I.M.; SW/4 & SW/4 NW/4 Section 11-23N-15W	152	49
5689	10-11-55	The Atkinson, Warren and Henley Company, a Corporation	$\frac{1}{2}$ interest in 160 acres being NW/4 Section 33-28N-15W	158	34
	7-22-55	Walter S. King, et ux	$\frac{1}{2}$ interest in 160 acres being NW/4 Section 33-28N-15W	158	32
5690	7-22-55	Walter S. King, et al	All interest in 160 acres being NE/4 Section 33-28N-15W	158	36
5727	3-16-56	Ida Wagner	All interest in 80 acres being S/2 SW/4 Section 9-26N-13W	161	467
6585	8- 1-63	George F. Keck, et al	All interest in 160 acres being SW/4 Section 1-28N-14W	230	430
6584	8- 1-63	George F. Keck, et al	All interest in 160 acres being SE/4 Section 31-29N-13W	230	428

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6592	9-18-63	Ralph H. Trenary	All interest in 165.91 acres being Lots 1 & 2, S/2 NE/4 Section 8-28N-14W. The above lease subject to Operating Agreement dated 2-26-64, between J. M. Huber Corporation, as Operator, and Wilcox Oil Company and Continental Oil Company as non-Operators in which Wilcox Oil Company owns 83.3333%.	231	15
6639	11-16-61	Frank A. Scripsick, et ux	½ interest in 156.24 acres being Lots 1 & 2, E/2 NW/4 Section 31-29N-18W	213	179
6640	11-16-61	Frank A. Scripsick, et al	½ interest in 165.01 acres being Lots 1 & 2, S/2 NE/4 Section 1-28N-14W	213	182
6641	11-16-61	Frank A. Scripsick, et ux	½ interest in 160 acres being NE/4 Section 7-28N-13W	213	200
6642	11-21-61	Wilbur H. Tanner, et ux	½ interest in 160 acres being SW/4 Section 32-29N-13W	213	197
6643	11-25-61	Clair Grace Roberson, et al	½ interest in 160 acres being NW/4 Section 32-29N-13W	213	188
6644	6-22-59	Lula B. Grant, et al	½ interest in 160 acres being NE/4 Section 36-29N-14W	213	185
6645	12- 2-61	Guy J. Ebersole, et ux	½ interest in 154.62 acres being Lots 3, 4 & 5, SE/4 NW/4 Section 6-28N-13W	213	194
6646	12- 5-61	Guy Ebersole, et al	½ interest in 158.74 acres being Lots 3 & 4, E/2 SW/4 Section 31-29N-13W	213	191
6660	2-28-64	T. W. Mantz, et al	All interest in 90 acres being North 90 acres of NW/4 Section 26-29N-14W	234	579

**STATE OF OKLAHOMA
COUNTY OF WOODS**

NON-PRODUCING MINERALS

- 1713 C. Hudspeth: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being S/2 SW/4 Section 23, E/2 NW/4 Section 26-27N-18W
- 1991 W. G. Parker: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being NW/4 Section 13-23N-14W
- 2140 Edward Snavelly et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 840.71 acres being Lots 1, 2, 4, S/2 NE/4, S/2 NW/4, NE/4 SW/4, S/2 SW/4, SE/4 Section 14, Lot 1, S/2 NE/4, S/2 SE/4 Section 15, NE/4 Section 23-29N-18W
- 2165 Edward Snavelly et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 2080.00 acres being S/2 NE/4, SE/4 Section 17, W/2 W/2 Section 21, E/2, S/2 NW/4, SW/4 Section 20, S/2 SE/4, NE/4 SE/4, S/2 SW/4, NW/4 SW/4 Section 29, S/2 NW/4, S/2 Section 32, N/2 Section 33, SW/4 Section 33-29N-18W
- 2166 Edward Snavelly et ux: An undivided ½ interest in and to all the oil, gas and other minerals in and under 200.00 acres being SW/4 Section 17, NE/4 NW/4 Section 20-29N-18W
- 2130 E. E. Whatley: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 23-29N-19W
- 2131 E. E. Whatley: An undivided ½ interest in and to all the oil, gas and other minerals in and under 160.00 acres being SE/4 Section 34-29N-19W

EXHIBIT A-2—Page 48

**NON-PRODUCING LEASES
WOODWARD COUNTY, OKLAHOMA**

Lease No.	Lease Date	Lessor	Description	Recorded	
				Book	Page
5748	6-18-56	C. E. Cross, et ux	All interest in 160 acres being E/2 NW/4, W/2 NE/4 Section 21-22N-18W	117	229
5768	8-18-56	Lizzie J. Chastel	All interest in 80 acres being N/2 SW/4 Section 35-23N-17W, I.M.	117	411
5771	6-22-56	Frank A. Roedell, et ux	½ interest in 160 acres being NE/4 Sec- tion 21-23N-17W	117	573
5932	11- 1-61	Hazel M. Randolph, Ind. and as Executrix of the Estate of L. S. Randolph, Deceased	¼ interest in 80 acres being W/2 SW/4 Section 10-23N-22W	183	116
	10-23-61	P. M. Buckley	¼ interest in above described lands.	183	114
	10-23-61	L. H. Witwer, et ux	¼ interest in above described lands.	183	112
5933	10-23-61	James F. Nagle, et al	½ interest in 80 acres being E/2 SW/4 Section 21-24N-20W	183	120
	10-23-61	L. H. Witwer, et ux	½ interest in above described lands.	183	119
	11- 1-61	Hazel M. Randolph, Ind. and as Executrix of the Estate of L. S. Randolph, Deceased	¼ interest in above described lands.	183	122
5934	10-31-56	Robert G. Feese, et ux	192/1024 interest in 137.29 acres being Lots 3 & 4, SE/4 NW/4 Section 3-24N- 21W	127	280
5935	11- 1-56	T. H. Rutledge, et ux	½ interest in 200 acres being E/2 NE/4; NE/4 SE/4; Section 10; SW/4 NW/4; NW/4 SW/4; Section 11-24N-21W	123	470
	11- 1-56	The Federal Land Bank of Wichita, Kansas	½ interest in 40 acres being NE/4 NE/4 Section 10-24N-21W	123	600
5936	11- 2-56	Mable J. Binding, a widow	1/16 interest in 160 acres being SW/4 Section 12-24N-21W	123	588
	11- 1-56	Cora Jividen, a widow	½ interest in 160 acres being SW/4 Sec- tion 12-24N-21W, I.M.	123	592
	11- 1-56	L. S. Randolph	½ interest in 160 acres being SW/4 Sec- tion 12-24N-21W	123	596
6565	8- 8-63	United States of America	50% interest in 234.54 acres being Lots 1, 2, 3, 4 and SE/4 NE/4 and NE/4 SE/4 Section 5-24N-22W	—	—

**STATE OF OKLAHOMA
COUNTY OF WOODWARD**

NON-PRODUCING MINERALS

- 2126 Gottfried Feil: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 28-22N-22W
- 2136 George Stricker: An undivided $\frac{1}{2}$ minerals interest in and to all of the oil, gas and other minerals in and under 160 acres being W/2 NE/4 and W/2 SE/4 Section 34-22N-22W
- 2145 R. H. Cox: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being S/2 Section 22-23N-22W
- 2151 Wood Syrie: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being W/2 SW/4 and SW/4 NW/4 of Section 8; and NW/4 NW/4 Section 17-21N-19W
- 2152 George Stricker, Jr.: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being E/2 NW/4 and NE/4 SW/4 and NW/4 SE/4 of Section 18-22N-21W
- 2156 Ferninand Beuke: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 80 acres being E/2 SW/4 Section 28-21N-22W
- 2163 Henry A. Dorner: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NE/4 Section 33-21N-20W
- 2168 Harry E. Rogers: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 31-22N-21W
- 2183 Vernie L. Smith: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 12-21N-20W
- 2184 L. B. Krouth: An undivided $\frac{1}{4}$ interest in all of the oil, gas and other minerals in and under 80 acres being N/2 NW/4 Section 27-22N-20W
- 2195 John Raymond Nelson: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being W/2 NW/4 Section 5 and E/2 NE/4 Section 6-21N-19W
- 2045 Edward L. Leighton: An undivided one-half ($\frac{1}{2}$) interest in and to all of the oil, gas and other minerals in and under and that may be produced from 2,840 acres, more or less, being all of SW/4 & W/2 SE/4 & SE/4 SE/4 Section 22; and N/2 NE/4 & NW/4 & N/2 SW/4 & SW/4 SW/4 Section 27; and E/2 Section 28; and all Section 33; and W/2 NW/4 and SW/4 SW/4 Section 34, all in 26N-18W; and W/2 NW/4 and SW/4 Section 4; and all Section 5; and NW/4 and W/2 NE/4 Section 8, all in 25N-18W
- 2093 W. H. Lothman: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NE/4 Section 14-20N-21W
- 2096 W. H. Lothman: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being W/2 SW/4 Section 2; and E/2 SE/4 Section 3; and SE/4 NW/4 and N/2 SW/4 and SW/4 SW/4 Section 11, all in 20N-20W
- 2099 Floyd O. Howarth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being S/2 NE/4 and N/2 SE/4 Section 20-22N-17W
- 2100 Floyd O. Howarth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being E/2 SW/4 and NW/4 SW/4 and SE/4 NW/4 Section 21-22N-17W
- 2116 W. H. Lothman: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being E/2 Section 13-21N-21W
- 2119 M. L. Bleckley: An undivided $\frac{1}{4}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 32-22N-21W
- 2120 George Stricker, Jr.: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 159 acres, being NW/4, except 1 acre out of center of the North side of said quarter, of Section 27-22N-22W
- 2121 Floyd O. Howarth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NE/4 Section 16-25N-19W

EXHIBIT A-2—Page 50

- 2201 J. M. Erwin: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under and that may be produced from 1,094.63 acres, more or less, being Lots 6 & 7 of Section 31-21N-17W; and Lots 1 and 2 and SW/4 NE/4 and Lot 3 and S/2 SE/4 and NW/4 SE/4 and W/2 Section 36-21N-18W; and Lots 1 and 2 of Section 25-21N-18W; and Lots 3 and 4 and S/2 NW/4 of Section 1-20N-18W; and SE/4 Section 1-20N-18W; and Lot 2 and SE/4 SE/4 of Section 26-21N-18W
- 2223 Samuel B. Wood: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 320 acres being NW/4 and N/2 SW/4 and SW/4 NE/4 and NW/4 SE/4 Section 24-21N-21W
- 2230 George C. Phillips: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being N/2 SE/4 and E/2 SW/4 Section 28-21N-19W
- 2237 Nettie Croskey: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 80 acres being W/2 NW/4 Section 23-21N-17W
- 2243 George F. Marston: An undivided $\frac{1}{4}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SW/4 Section 33-21N-22W
- 2461 Wiley Walters: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 800 acres being NE/4, S/2 Section 30; and N/2 Section 31-25N-18W
- 2464 L. B. Krouth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 115 acres being W/2 NW/4 Section 17 and that part of W/2 SW/4 of Section 8 lying and being South of The A.T. & S.F. R.R. Co. ROW 22N-22W
- 2470 L. B. Krouth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being SE/4 Section 1-20N-22W
- 2480 L. B. Krouth: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 160 acres being NW/4 Section 15-21N-22W
- 3094 Irish Syndicate Live Stock & Loan Company: An undivided $\frac{1}{2}$ interest in and to all of the oil, gas and other minerals in and under 240 acres being Lots 1, 2, 3 and 4 and SE/4 NE/4 and NE/4 SE/4 Section 5-24N-22W

**STATE OF TEXAS
COUNTY OF CALLAHAN**

NON-PRODUCING MINERALS

- T-71 John F. Dickson: An undivided 19/250 interest in and to all the oil, gas and other minerals in and under Tract 1: 320.00 acres being E/2 of Section 149, B.B.B. & C. Ry. Co. Survey, patented to S. M. Swenson by Patent 29, Vol. 14.
Tract 2: 125.00 acres being out of Survey No. 1, I & GN Ry. Co. Survey, patented to W. J. Glenn by Patent No. 256 in Vol. 54.
Said tracts being the same land described in the certain Mineral Deed dated October 1, 1930, by and between John L. Dickson, Grantor, and H. F. Wilcox Oil and Gas Company of Texas, Grantee, recorded December 1, 1930, in Book 135, at page 636, of the records of Callahan County, Texas.

**NON-PRODUCING LEASES
CARSON COUNTY, TEXAS**

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
6586	2-11-60	G. H. Deahl, et al	All interest in 310.33 acres being W/2 Sec. 23, in Blk. T of AB&M Survey, less 9.67 acres	1	361
6597	9- 9-57	Nolan Judy, et ux	All interest in 320 acres being SW/4 Sec. 22; NE/4 Sec. 23, in Blk. T of AB&M Railway Company Survey	106	549

EXHIBIT A-2—Page 51

NON-PRODUCING LEASES CLAY COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
8879	9-28-43	George W. Scaling, et al	¼ interest in 80 acres being west 80 acres of SW/4 Sec. 15, HT&B Survey A-217, subject to P.P. of \$8,000.00 from ¼ of ¾ ORI reducible to 3/32 of 7/8 ORI after payout.	140	558

STATE OF TEXAS COUNTY OF COKE

NON-PRODUCING MINERALS

T-72 John L. Dickson: An undivided 1/32 interest in and to all the oil, gas and other minerals in and under 160.00 acres being the Northeast ¼ of Section 8, Block W, Certificate 2/1549 T & P Ry. Co. Land. Subject to oil and gas lease dated February 8, 1962, executed by J. R. Sims, as Agent and Attorney in fact for L. S. Abbott et al Lessor, to Norris B. Creath, Lessee, recorded in Vol 141, page 251 Deed records of Coke County, Texas.

NON-PRODUCING LEASES COLEMAN COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
5892	4-26-44	J. F. Gaines, et ux	¾ interest in 82.80 acres being Blk. 13 of the John H. Barclay Survey No. 700, less South 20 acres thereof, subject to an un-reduced 3/64 of 7/8 ORI. All interest in 49.85 acres being the west 49.85 acres of Blk. 14 of the John H. Barclay Survey No. 700, subject to 1/16 ORI	249	320

STATE OF TEXAS COUNTY OF ERATH

NON-PRODUCING MINERALS

T-67 J. C. Cooke Oil Company: an undivided ¼ interest of ½ of all the oil, gas, casinghead gas and all other production that may be obtained from The West 50 acres of the South 234 acres of the J. E. Smith 497 acre subdivision of the Thomas Stubblefield Survey

NON-PRODUCING LEASES HENDERSON COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6329	9-18-61	Billie Gene Wright, et ux	All interest in 122.25 acres being out of the Dickerson Parker Survey; also, all interest in 34.00 acres being out of the J. N. Acosta 160 acre Survey, both of which tracts are more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	59
6330	9-18-61	Alva L. Jolliff, et al	All interest in 40 acres being NE/4 NE/4 of the 640 acre George E. Harrison, A-364 Survey as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	43

EXHIBIT A-2—Page 52

6331	9-18-61	G. U. (Jack) Browning, et ux	All interest in 40 acres being out of the Isaac Williams Survey, Abstract No. 802, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	53
6332	9-18-61	Evelene Sue Bass, et al	All interest in 100 acres being out of the James K. Brown Survey, No. A-64, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	51
6333	9-18-61	G. U. (Jack) Browning, et al	½ interest in 50 acres being out of the Isaac Williams Survey, Abstract No. 802, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	47
	9-18-61	A. E. McCain, et ux	¼ interest in 50 acres being out of the Isaac Williams Survey, Abstract No. 802, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	49
6335	9-18-61	H. C. Barton	All interest in 5.00 acres being out of the James K. Brown Survey, A-64, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	505	45
6334	9-18-61	G. U. (Jack) Browning, et al	½ interest in 52.50 acres being out of the Susan Head Survey, Abstract No. A-293, as more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	506	288
6363	9-18-61	Cuba English, et al	746/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	481
	9-18-61	K. E. Browning, et al	126/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	484

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
9-18-61		Earnest English	160/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	493
9-18-61		H. W. (Hamp) English	160/1260 interest in 194.80 acres being 160 acres out of the Willis Parker Survey, 5.00 acres out of the Jackson Wells Survey and 29.80 acres being Blk. 8 of the George Bonds 320 acre Survey each of which is more fully described in lease reference hereby being made to said lease and said description in said lease being hereby incorporated by reference.	509	491

**STATE OF TEXAS
COUNTY OF LIMESTONE**

NON-PRODUCING MINERALS

T-79 John L. Dickson: An undivided .14548 interest in and to the oil, gas and other minerals in and under 14.00 acres known as the King Dancer Tract out of the Pedro Varella XI League Grant, more particularly described as follows: Beginning at the Southeast corner of the Mariah Slaughter Tract, a stake in the East line of said King Dancer's 56 acre Tract, 396 varas South 35 East from the Northeast corner of said 56 acre tract; thence South 55 West with Mariah Slaughter's South line 376.5 varas; thence South 45 East with the West line 223.5 varas; thence North 55 East 344.8 varas; thence North 35 West 221.7 varas to the place of beginning, and containing 14 acres of land, more or less.

The Above is subject to a reservation as set forth in a certain mineral deed dated January 28, 1930, executed by L. L. Steele to John L. Dickson and covering the above described land, said deed being filed for record on February 4, 1930, and is recorded in Vol. 211 at page 500 of the Deed Records of said County and State. Said reservation provides to-wit: It is understood between the grantee and grantor herein that should there at any time be oil or gas, or either of them, produced from a greater depth 3150 feet, the grantee herein shall receive only .007956 of the oil, or one-half of the interest transferred in this deed to the present production from a greater depth than 3,150 feet. Or in other words, the grantor herein reserves one-half of all the oil, gas, or other minerals that may be produced from a greater depth than 3,150 feet from this interest.

T-80 John L. Dickson: An undivided 88/46080ths interest in and to the oil, gas and other minerals in and under A part of the Pedro Varella XI League Grant, in Limestone County, Texas: Beginning on the West line of the J. R. Henry Tract where the same is crossed by Rocky Creek; thence down said creek to the East line of the Ross Tract; thence Southward with the East line of the said Ross Tract to its SE corner; thence North 45 East to the West line of the Henry Tract; thence North 45 West to the place of beginning, containing 60 acres, more or less, and known as the Alexander place, and being the same land conveyed to M. Alderman by deed dated November 5, 1910, by Ynez R. Mexia, I. May Mexia, May D. Mexia and C. E. Mexia; also being the land that was bought by Herbert Bluit from Joseph and Julius Nussbaum by deed dated _____ day of _____, 19____, recorded in volume 60, page 363, Deed Records of Limestone County, Texas, to which deed reference IS HEREBY made for all lawful purposes.

The above is subject to the following reservation, to-wit: It is hereby understood between the grantee and the grantor herein that the grantee herein shall receive no part of the oil, that may hereinafter be produced from a depth greater than 3,150 feet.

NON-PRODUCING LEASES MADISON COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6341	11-21-61	Dan B. Cole, et ux	½ interest in 291.97 acres out of the Daniel Parker and James Burns Surveys more fully described in lease, reference hereby being made to said lease, and said description in said lease being hereby incorporated by reference.	136	704
6342	11-28-61	Joe R. Hinds, et ux	½ interest in 345.27 acres comprising ten tracts out of the Daniel Parker Survey and the J. Woodruff Survey being more fully described in lease, reference hereby being made to said lease, and said description in said lease being hereby incorporated by reference	136	706

STATE OF TEXAS COUNTY OF MONTAGUE

NON-PRODUCING MINERALS

- 3229 Frank H. Dunn: An undivided 10/110ths interest in and to the oil, gas and other minerals in and under 110 acres being a part of Section No. 5, E.T. R.R. Co. Survey, Abst 230 Described as follows: Beginning 356 ¾ vrs. S. 45°E. from the West corner of the East Quarter (E/2) of said Section No. 5; thence S. 45°E. 593 ¾ vrs. to the South Corner of said East Quarter of said Section No. 5; thence N.45°E. 950 vrs. to the East corner of said section No. 5; thence N. 45°W. 712 ½ vrs. to a corner in the N.E. Boundary line of said Section; thence S.45° W. 475 vrs. to corner; thence S.45°E. 118 ¾ vrs. to corner; thence S.45°W. 475 vrs. to the place of beginning.
- 3243 Frank H. Dunn: An undivided 10/148ths interest in and to the oil, gas and other minerals in and under 143 acres being a part of the Mary Freeland Survey, Abstract No. 1481 described as follows: Beginning at the North corner of said Mary Freeland Survey, the same being also the North corner of Section No. 6 as surveyed for E.T. R.R. Co. by virtue of Cert. No. 285, situated about 5 miles S. 55°E. from the Town of Montague, Texas; thence S.47°W. With the N.W. line of said Mary Freeland Survey 950 vrs to its West corner; thence So. 43°E. 950 vrs. to its south corner; thence N. 47°E. 542 vrs. to a creek; thence in a northerly direction with said creek 1366 feet to the N.E. line of said Mary Freeland Survey at a point 856 feet N. 43°W. from the East corner of said Mary Freeland Survey; thence N. 43°W. 642 vrs to the place of beginning.

NON-PRODUCING LEASES STEPHENS COUNTY, TEXAS

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
8480	12-16-40	Annie C. Whallen, et al	All interest in 80 acres being S/2 E/2 of the TE&L Survey No. 1089, Abstract No. 370.	187	590

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EXHIBIT A-3

**TO THAT CERTAIN CONVEYANCE
DATED JULY 21, 1964, BY AND BETWEEN
WILCOX OIL COMPANY, GRANTOR
AND W X C COMPANY, GRANTEE.**

**KINGMAN COUNTY, KANSAS
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded Book</i>	<i>Page</i>
6285	8-20-61	Barney B. DeWeese and Lela N. DeWeese	NE/4 NW/4 Section 17-29S-7W	Not	given

**BECKHAM COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor-Grantor</i>	<i>Brief Description</i>	<i>Recorded Book</i>	<i>Page</i>
1983	8-23-50	Cleo Walter et al	N/2 Section 24-10N-21W	84	306
1983	11-19-49	Cleo Walter	N/2 NE/4 Section 23, S 1/2 SE/4 Section 14-10N-21W	80	455

**CREEK COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor-Grantor</i>	<i>Brief Description</i>	<i>Recorded Book</i>	<i>Page</i>
1983	6-11-86	Harriet P. Gilstrap	N/2 NW/4 SW/4 Section 25-16N-9E	903	262
1983	8- 8-41	Lizzie Morrison Jones	S/2 NW/4 SE/4 Section 6-16N-9E	481	256
1983	8- 8-41	Ada Hill Anderson	SW/4 NE/4, E/2 SE/4 NW/4, N/2 NW/4 SE/4 Section 6-16N-9E	482	61
1983	8- 8-41	Oscar Harany	W/2 NW/4 NW/4 Section 6-16N-9E	481	257
1983	11-18-35	Pearlie Irene Roberts	W/2 W/2 Section 8-16N-9E	485	880
1983	4- 4-29	Addie Cunningham	NW/4 SE/4 Section 13-16N-9E	—	—
1983	4- 4-29	H. H. Harrison	SE/4 SW/4, S/2 NE/4 SW/4 Section 13-16N-9E	—	—
1983	6-12-27	H. H. Harrison	SW/4 SE/4, SE/4 SW/4 Section 13- 16N-9E	351	558
1983	8-24-36	C. W. Porter	SW/4 SW/4 Section 15-16N-9E	437	547
1983	4-10-36	M. J. McSand	SE/4 SW/4, S/2 NE/4 SW/4 Section 15- 16N-9E	436	350
1983	4-17-36	Ed Abraham et al	SE/4 SW/4, S/2 NE/4 SW/4 Section 15-16N-9E	436	394
1983	9-14-37	W. G. Pardoe et al	NW/4 NW/4 Section 17-16N-9E	446	79
1983	8-14-36	Dexter Slyman	NE/4 Section 18-16N-9E	437	503
1983	8- 9-36	J. E. Nipp et al	E/2 E/2 SE/4 Section 21-16N-9E	434	481
1983	4-17-25	S. P. Stubblefield	E/2 NE/4 Section 21-16N-9E, S/2 NW/4 NW/4 Section 22-16N-9E	311	293
1983	4-11-29	Charles P. Fronchat	W/2 SW/4 Section 24-16N-9E	—	—
1983	5-21-29	David Lee Allen, by his Guardian	NW/4 Section 24-16N-9E	377	565

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
1983	2-17-42	John Bishop	NW/4 Section 24-16N-9E	491	107
1983	4- 4-29	L. W. Atteberry	W/2 NW/4 Section 25-16N-9E	—	—
1983	4- 6-29	Mae Cupp	N/2 NW/4 SW/4 Section 25-16N-9E	—	—
1983	4- 4-29	Ed Abraham	S/2 NW/4 SW/4 Section 25-16N-9E	—	—
1983	9-29-25	Jessee Houston, by his Guardian	SW/4 SE/4 Section 26-16N-9E	322	337
1983	10-14-25	Charlie Seber, by his Guardian	SE/4 SE/4 Section 26-16N-9E	322	338
1983	10-14-25	Frank Mike	SE/4 SE/4 Section 26-16N-9E	321	559
1983	9- 4-25	W. W. Groom et al	NE/4 SW/4 Section 26-16N-9E	—	—
1983	9-22-25	A. A. Rolleston	NW/4 Section 26-16N-9E	322	341
1983	11- 2-25	Ed Abraham	NE/4 NE/4 Section 27-16N-9E	321	557
1983	11-23-36	A. H. Davidson	NW/4 NW/4 Section 27-16N-9E	441	547
1983	7-29-36	Carol L. Dunlap	SW/4 SW/4, W/2 SE/4 SW/4 Section 27-16N-9E	437	427
1983	3-17-36	Ed Abraham	West 50 acres of S/2 SE/4 Section 27- 16N-9E, SE/4 SE/4 Section 26-16N-9E	—	—
1983	10-10-28	Reese Fox	W/2 SE/4 NE/4 Section 29-16N-9E	373	401
1983	1- 6-33	Elizabeth M. Frierson	W/2 SE/4 Section 29-16N-9E	418	191
1983	9- 4-25	May B. Lovett, Admx.	W/2 SE/4 Section 36-16N-9E	321	558
1983	9- 8-25	Joe Allen	SE/4 SE/4 Section 36-16N-9E	321	557
1983	9-10-25	Marvin L. Jones	SE/4 NW/4 Section 36-16N-9E	322	342
1983	9- 9-25	James Jackson	NW/4 NW/4 NW/4 Section 36-16N-9E	322	341
1983	9- 8-25	Daniel Seay	NE/4 NW/4 NW/4, S/2 NW/4 NW/4 Section 36-16N-9E	322	343
6506	4- 4-63	Roy Dorrell and Nora Dorrell	5.12 acres, more or less, out of NW/4 NW/4 SW/4 of Section 18-16N-10E, as more particularly described in said lease	931	318-19
5834	11-22-61	J. B. Castle, individually and as Agent for Minority Owners	SW/4 Section 35-15N-7E containing 160 acres, more or less	901	307
2800	12- 7-36	Albert Kelly, et ux	N/2 SE/4 Section 35-16N-8E (Surface lease for storage)	442	102
2926	4-26-51	W. R. Yeldell et al	Strip of land 40' wide, near E line of NW/4 of Sec. 11-14N-6E to be used as Right of Way into A. W. Lycan lease	178	293

KINGFISHER COUNTY, OKLAHOMA

5946 Dover Hennessey Gas Products Plant

An 0.682 participation in the Dover-Hennessey Gas Products Plant, Kingfisher County, Oklahoma, as per that certain agreement for construction and operation of Dover Hennessey Gas Products Plant, dated _____ day of _____, 1961, by and between Wilcox Oil Company, et al, and that certain Revision of Exhibit "B" to said contract, dated June 1, 1962.

Net Participation in plant is 0.682.

EXHIBIT A-3—Page 2

LINCOLN COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded	
				Book	Page
5559	10-21-63	State of Okla.	W/2 SE/4 Section 16-14N-6E (Agricultural lease)	61	4056 (land office)
5585	12-21-61	State of Okla.	SW/4 Section 16-14N-6E (Agricultural lease)	61	816 (land office)
5591	1- 1-55	Joe Delozier et al	S/2 SW/4 Section 10, N/2 NW/4 Section 15, all in 14N-6E (Surface lease for location of producing facilities)	298	169
6483	12-10-62	W. E. Blaney et ux	NW/4, N/2 NE/4 Section 21-14N-6E (Surface Lease for location of producing facilities)	454	172
1096	1- 1-64	Sac & Fox Tribal Council	12.17 acres in SW/4 Section 15-14N-6E (Business lease)	—	—
	12- 8-62	Sac & Fox Tribal Council	625.23 acres being S/2 NW/4 and SW/4, Section 15 (less 12.17 acres above) E/2 SE/4 Section 16, (less 2.60 acres) and NW/4, N/2 SW/4, & N/2 NE/4 Section 22, all in 14N-6E (Agricultural Lease)	—	—

NOBLE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded	
				Book	Page
1983	4- 6-61	Gladys L. Bechthold	Approx. 1½ acre in NW/4 NW/4 Section 24-20N-1W	—	—
1983	11- 4-61	Paul Tetyak, by Fay Pricer, Guardian	S/2 SW/4 Section 14-20N-1W	—	—
1983	5-26-60	Leonora M. Seids et al	Approx. ½ acre in NW/4 NE/4 NW/4 Section 20-20N-1E	104	583
1983	8-18-59	Gladys L. Bechthold	S/2 Section 18-20N-1W	99	288
1983	1- 5-59	Gladys L. Bechthold	NW/4 Section 24-20N-1W	95	401
1993	4- 4-59	Gladys L. Bechthold	Approx. ½ acre in NW/4 NW/4 Section 24-20N-1W	96	612
1983	1- 5-59	Herman G. Habben et al	NE/4 Section 24-20N-1W	95	400
1983	4-29-59	H. G. Habben et al	Approx. ¾ acre in NW/4 NE/4 Section 24-20N-1W	97	277
1983	1- 9-59	John Bennett Shaw	SW/4 Section 18-20N-1W	96	116
1983	2-27-59	Max Groom, et al	A strip of land not to exceed two (2) rods in width across South 300 feet of S/2 SE/4 Section 18-20N-1W	96	117
1983	1- 6-59	Dwight Day, et al	SW/4 Section 17-20N-1W	96	399
1983	1- 6-59	Helen Schott et al	SE/4 Section 17-20N-1W	96	398
1983	1- 9-59	Ethel H. Spradlin et al	SW/4 Section 16-20N-1W	96	397
1983	1- 6-59	J. J. Bezdicek	S/2 SW/4 Section 15, SE/4 Section 16-20N-1W	95	396
1983	1- 6-59	M. D. Springfield	SE/4 Section 15-20N-1W	95	395
1983	1-19-59	Kate Brackin, et al	S/2 SW/4 Section 14-20N-1W	95	429

EXHIBIT A-3 — Page 3

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor</i>	<i>Description</i>	<i>Recorded</i>	
				<i>Book</i>	<i>Page</i>
1983	1- 5-59	Herbert Dahl et al	SE/4 Section 14-20N-1W	95	394
1983	1- 5-59	Leonora M. Seids et al	NW/4 Section 20-20N-1E	95	393
1983	1- 5-59	Helen M. Wilson et al	NE/4 Section 20-20N-1E	95	392
1983	1- 5-59	Nora Nellie Elgin et al	E/2 NW/4 Section 19-20N-1E	95	390
1983	1- 5-59	Nora Nellie Elgin et al	W/2 NW/4 Section 19-20N-1E	95	389
1983	1- 5-59	Nora Nellie Elgin et al	W/2 NW/4 Section 19-20N-1E	95	388
1983	4-27-59	Nora Nellie Elgin et al	Approx. 1 acre in NW/4 NW/4 Section 19-20N-1E	97	274
1983	3-30-60	Nora Nellie Elgin et al	Approx. 1 acre in NW/4 NW/4 Section 19-20N-1E	103	386
1983	9- 5-59	Carl O. Gottschalk et al	185 rods in Section 17-20N-1E	99	653
1983	1- 5-59	Ralph E. Sherrard	NE/4 Section 19-20N-1E	95	387
1983	1-28-59	Carl Gottschalk et al	One (1) acre in SW/4 SE/4 SW/4 Sec- tion 17-20N-1E	95	402
1983	1- 9-59	State of Oklahoma	Licenses to cross S. H. 86 approx. 6 miles South of Perry, Okla; ie, 63 feet North of SW/corner of Section 14-20N-1W (Permit No. 32-41)	—	—
1983	1- 9-59	State of Oklahoma	License to cross U. S. 77 approx. 6 miles South of jct. U. S. 77 and U. S. 64, 5 miles West of Perry, Okla; ie, 63 feet South of NW/corner of Section 24-20N-2W (Per- mit 32-42)	—	—
1983	3-10-59	Arthur L. Bower	W/2 SE/4 Section 17-20N-1E	97	696
1983	6-18-58	Carl O. Gottschalk	176 rods across SW/4 and 84 rods across NE/4 Section 17-20N-1E	90	575
1983	8-30-62	Lawrence E. Schwardt et al	Approx. 1 acre in SW/4 SW/4 Section 13-20N-2W	117	673
1983	1- 6-59	Thomas Lee Jerome	SE/4 Section 13-20N-2W	96	115
1983	1-15-59	Fay M. Roberts	SW/4 Section 13-20N-2W	96	113

**OKLAHOMA COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES**

<i>Lease No.</i>	<i>Lease Date</i>	<i>Lessor-Grantor</i>	<i>Brief Description</i>	<i>Recorded</i>	
				<i>Book</i>	<i>Page</i>
2658	2-11-31	H. C. Tanner	A Part of NE/4 Section 10-11N-3W	105	529
2658	6-15-31	Terminal Oil Mill Company	A part of NW/4 Section 3-11N-3W	—	—
2658	6-30-31	Terminal Land Company	A part of NW/4 SW/4 Section 3-11N-3W	—	—
2658	5- 1-31	Oklahoma Railway Co.	A strip of land in W/2 Section 3-11N-3W	—	—
2658	7-21-32	Terminal Land Company	Approx. 57½ rods across South end of Gov't Lot #6 of NW/4 Section 3-11N-3W	222	177
2658	6-18-32	J. R. Polin	Across N. end of Lots 17, 18, 19 and 20, Block 2, Comptons Park Addition of City of Oklahoma City, Oklahoma	—	—
2658	4- 7-33	F. G. Martin	SE/4 SE/4 Section 36-12N-3W	—	—
2658	6-23-32	H. G. Marshall	Part of Section 36-12N-3W, part of Sec- tion 31-12N-2W	—	—
2658	7-15-31	Rosa Hammer et vir	N. 53½ acres of SW/4 (Being Blk 1 of Corffs Sub-division)	180	544

EXHIBIT A-3—Page 4

Lease No.	Lease Date	Lessor	Description	Recorded Book	Page
2658	8-20-31	J. C. White	Lot 1 Blk 5 of Chapin-Levy Addition of Oklahoma City, Oklahoma	178	196
2658	9-16-31	Missouri-Kansas-Texas Railroad Company	A plot of ground 75 feet wide by 100 feet in length in NW/4 Section 8-11N-3W	—	—
2658	5-20-31	The Chicago, Rock Island and Pacific Railway Company	Described by Metes and Bounds in Agreement	—	—
2658	5-31-31	The Chicago, Rock Island and Pacific Railway Co.	Described by Metes and Bounds in Agreement	—	—
2658	5- 4-31	The Chicago, Rock Island and Pacific Railway Company	Part of Easterly R.O.W. Line of RR Company about 78 feet N. from Easterly Direction of N. Line of Pottowatomie Avenue, McCormicks Factory Addition to Oklahoma City, Oklahoma	—	—
2658	5- 4-31	St. Louis San Francisco	A Tract of land in McCormicks amended Factory Addition of City of Oklahoma City, Oklahoma	—	—
2658	3-22-33	The City of Oklahoma City, Oklahoma	Described by Metes and Bounds in Agreement	—	—
2658	4-17-34	The City of Oklahoma City, Oklahoma	Part of Chapin & Levy Addition to Oklahoma City	—	—
2658	4- 3-34	The City of Oklahoma City, Oklahoma	A tract of land along Reno Avenue in Section 34-12N-3W	—	—

OKMULGEE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Page
1983	8-11-59	Bennie Denham et ux	60 rods across E/2 NE/4 NW/4 Section 35-15-11E	—	—
1983	8-11-59	William M. Harvey et al	160 rods across N. Line of NE/4 Section 34-15N-11E	—	—
1983	8- 3-36	Wm. Thompson et al	SE/4 NE/4 Section 7-15N-11E	487	329
1983	8-28-28	Wm. Thompson et al	SW/4 Section 7-15N-11E	333	289
1983	12-18-37	Wm. Thompson	Pipeline R.O.W. beginning 1570 feet E. of SW/corner of Section 19-15N-11E and extending Northerly to a point 285 ft. S. of N. Line of Section 18-15N-11E and 1855 feet east of W. line of Section 18-15N-11E a total distance of 2 miles	499	512
1983	4-11-29	Wm. Thompson	N/2 Section 30-15N-11E	—	—

OSAGE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Page
3885	5- 8-50	John Oberly, Principal Chief for Osage Tribe #4	SW/4 Section 15-22N-8E	—	—
1983	8-31-55	George W. Snedden	N/2 Section 32-28N-8E	73	462
5642	5-27-59	Paul Pitts, principal Chief for Osage Tribe #74	SW/4 NW/4 Section 33-28N-8E	—	—

EXHIBIT A-3 — Page 5

PAYNE COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
1983	7- 2-52	Sam Lee et al	SW/4 Section 3, NW/4 Section 10-18N-2E	109	188

WASHITA COUNTY, OKLAHOMA
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
1988	8-23-50	Cleo Walter	S/2 NW/4 Section 19-10N-20W	—	—

GRAY COUNTY, TEXAS
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
T-85	12-10-26	Panhandle & Santa Fe Railway Company	Contract for Industry Track, 2567 feet in length in Pampa, Gray Co., Texas	—	—
T-11	7-14-26	Phebe A. Worley & Albert Combs	W/2 Section 59, I&GN RR Co. (Blk 3) Survey	30	143
	7-14-26	Phebe A. Worley	SE/4, Section 64; and E/2 Section 63, I&GN RR Co., (Blk 3) Survey	30	144
	7-14-26	Phebe A. Worley, E. E. Reynolds, Amanda Reynolds	E/2 and the SW/4 of Section 62, I&GN RR Co., (Blk 3) Survey	30	145
	7-15-26	C. N. Baggerman	NW/4, Section 64, I&GN RR Co. (Blk 3) Survey	30	241
	7-15-26	J. M. Saunders	S/2 of Section 65 and NE/4 of Section 64 I&GN RR Co. (Blk 3) Survey	30	242
	7-15-26	Wm. Flaherty	NW/4, Section 65, I&GN RR Co. (Blk 3) Survey	30	243
	7-15-26	Alex Smith	NE/4 Section 80, and SE/4 Section 79, I&GN RR Co., (Blk 3) Survey	30	244
	7-15-26	T. H. Lane	NE/4 Section 79, I&GN RR Co. (Blk 3) Survey	30	245
	7-15-26	Chas. C. Cook	NW/4 Section 79, I&GN RR Co. (Blk 3) Survey	30	246
	7-15-26	J. R. Henry	W/2, Section 78 and NE/4 Section 91, I&GN RR Co., (Blk 3) Survey	30	246
	1-15-36	Fred Palmer and Callie Halwes Klein	SE/4 Section 87, I&GN RR Co. (Blk 3) Survey	67	307

LIPSCOMB COUNTY, TEXAS
RIGHTS-OF-WAY, EASEMENTS AND OTHER MISCELLANEOUS PROPERTIES

Lease No.	Lease Date	Lessor-Grantor	Brief Description	Recorded Book	Recorded Page
1983	5-27-59	C. R. Brown, et ux	Approx. 1 acre in NW/corner of Section 60, Blk 10, H.T. & B. R. R. Survey	78	459
1988	5-27-59	C. R. Brown et al	A strip of land for pipeline along the North line of Section 60, Blk 10, H.T. & B. B. R. R. Survey	78	458

EXHIBIT A-3 — Page 6

FEE PROPERTIES CLEVELAND COUNTY, OKLAHOMA

SW/4 Section 17-9N-1W containing 160 acres situated in Cleveland County, Oklahoma and being the same land described in,

Deed	Grantor	Grantee	Dated	Recorded	Interest
a	Odel Henson, et ux	H. F. Wilcox Oil and Gas Company	12-19-28	Vol 77, page 843	½ minerals
b	County Treasurer (Tax Sale)	A. L. Chapman	4-17-39	Vol 126, page 104	Surface and ½ of the minerals

subject to:

1. Pipeline Right-of-Way in favor of Champlin Refining Company.

FEE PROPERTIES CREEK COUNTY, OKLAHOMA

SW/4 Section 35-16N-8W containing 164 acres and N½ NE¼ NW¼ Section 2-15N-8W situated in Creek County, Oklahoma, and being the same land described in Quit Claim Deed dated October 2, 1951, from The Board of County Commissioners of Creek County, Oklahoma, Grantors, to A. L. Chapman, Grantee, recorded in Volume 633, Page 322, of the records of Creek County, Oklahoma, insofar as said instrument covers the surface estate only, subject to the following reservations:

1. 2 acres out of SW/4 used for County cemetery.
2. Reservation of all minerals by County.
3. 14 acres out of SW/4 SW/4
4. 1 acre out of SW/4 conveyed to Deep Rock Oil Company.

FEE PROPERTIES OKLAHOMA COUNTY, OKLAHOMA

S/2 of Block 9, Chapin and Levy Addition to Oklahoma City, covering area of 75' x 150' situated in Oklahoma County, Oklahoma, and being the same lands described in Warranty Deed executed December 18, 1934, from F. G. Martin and wife, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 365, Page 404, of the records of Oklahoma County, Oklahoma, insofar as said instrument covers the surface estate only.

Lots 11, 12, 13 and 14, all in Block 7 of Schillings Addition to Oklahoma City, situated in Oklahoma County, Oklahoma, and being the same lands described in Warranty Deed executed July 19, 1933, from Robert M. Messenger, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 434, Page 476, of the records of Oklahoma County, Oklahoma, insofar as said instrument covers the surface and minerals.

FEE PROPERTIES OKMULGEE COUNTY, OKLAHOMA

NE/4 SE/4 Section 36-14N-11E, situated in Okmulgee County, Oklahoma and being same lands described in Warranty Deed executed March 18, 1918, from H. H. Hay, Grantor, to Giles Penick, Grantee, recorded in Volume 140, Page 334, of the records of Okmulgee County, Oklahoma, insofar as said instrument covers an undivided 1/36 interest subject to:

1. Oil and Gas lease dated January 26, 1917, executed in favor of E. W. Kimbley and under which Wilcox Oil Company receives 1/36 of 1/8 interest in all oil and gas produced.

FEE PROPERTIES POTTAWATOMIE COUNTY, OKLAHOMA

All N/2 SW/4, Section 23-6N-3E, containing 80 acres, situated in Pottawatomie County, Oklahoma and being the same lands described in Warranty Deed executed October 15, 1932, from J. K. Warren, Grantor, to Wilcox Oil and Gas Company, Grantee, recorded in Volume 186, page 366, of the records of Pottawatomie County, Oklahoma, insofar as said instrument covers the surface estate only.

**LEASES
TULSA COUNTY, OKLAHOMA**

Lease dated October 1, 1936, from F. S. Kerrigan, and J. F. Kerrigan, Lessors, to H. F. Wilcox Oil and Gas Company, Lessee, wherein Wilcox leased for a period of 20 years ending September 30, 1966, the following described premises situated in Tulsa, Tulsa County, Oklahoma:

Lot 1, in Block 2 (except Northernmost 40') and Lot 2, in Block 2, all a part of the Kirkwood Addition to the City of Tulsa.

Wilcox constructed an office building and filling station on these leased premises and is now bound on the following subleases:

1. Lease from Wilcox Oil Company to Harry Payne of all that portion of Lots 1 and 2 of Kirkwood Addition presently being occupied by Wilcox and identified as Wilcox Station #107; such lease expiring 3 8/12 years from January 1, 1963.
2. Lease from Wilcox Oil Company to Southern Industrial Finance Corporation of all the portion of Lots 1 and 2, Kirkwood Addition, on which is situated a white stucco, one story, office building together with the parking area to the North and West thereto; such lease expiring September 30, 1966.

All right, title and other interests which Wilcox Oil Company has in the above mentioned buildings are included herein.

**FEE PROPERTIES
TULSA COUNTY, OKLAHOMA**

Northerly 50' of Lot 2, Block 159, situated in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, being the same land described in Warranty Deed dated June 25, 1928, from R. W. Thomas and Lula D. Thomas, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 732, page 896, of the records of Tulsa County, Oklahoma.

All of Lot 1, in Block 159, situated in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, being the same land described in Warranty Deed dated February 24, 1920, from Emily C. Potter, J. J. Culbertson, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Book 333 at Page 890, of the City of Tulsa records, Tulsa County, Oklahoma.

The North 25' of Lot 5 and the South 25' of Lot 6, in Block 166, situated in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, and being the same land described in Warranty Deed dated October 10, 1928, from H. F. Wilcox Loan and Investment Corporation, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 817, page 29, of the City of Tulsa records of Tulsa County, Oklahoma.

North 75 feet of Lot 6, Block 166, in the Original Town of Tulsa, Oklahoma, together with all improvements thereon, and being the same land described in Warranty Deed dated October 10, 1928, from H. F. Wilcox Loan and Investment Corporation, Grantor, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 817, page 25, of the City of Tulsa, records of Tulsa County, Oklahoma, and subject to,

1. Rental Agreement dated October 16, 1963, with B & B Auto Parks for commercial parking space.

**FEE PROPERTIES
RENO COUNTY, KANSAS**

SW/4 NW/4 Section 12-23S-4W, containing 40 acres, situated in Reno County, Kansas and being the same lands described in Warranty Deed executed February 20, 1937, from H. F. Neufeld, and wife, Grantors, to H. F. Wilcox Oil and Gas Company, Grantee, recorded in Volume 195, page 430, of the records of Reno County, Kansas insofar as said instrument covers the surface estate only and subject to:

1. Right-of-Way Agreement with Drillers Production Company dated May 7, 1937.
2. Right-of-Way in favor of Cities Service Gas Company as per letter agreement of September 1, 1948.

**FEE PROPERTIES
GRAY COUNTY, TEXAS**

90 feet off the East end of Lot 1 in Block 20, South Side Addition to the Town of Pampa, situated in Gray County, Texas, being the same lands described in Warranty Deed dated March 27, 1925, from T. W. Johnson, et ux, Grantor, to H. F. Wilcox, Grantee, recorded May 15, 1925, reception number 8322, in the records of Gray County, Texas.

EXHIBIT A-3 — Page 8

LAW OFFICES OF
McCLURE & TROTTER
SUITE 408
SEVENTEEN TEN H STREET, N. W.
WASHINGTON 6, D. C.

298-7040

June 16, 1964

WILLIAM P. McCLURE
JOHN D. HECKERT
ROGER S. LEVITAN

HOUSTON OFFICE
TROTTER, CHILDS, FORTENBACH & McCLURE
JACK T. TROTTER
P. O. BOX 391
HOUSTON 1, TEXAS

Mr. Bert E. Lane
Wilcox Oil Company
Post Office Box 1440
Tulsa, Oklahoma 74101

In re: Acquisition of Wilcox Oil Company by
Tennessee Gas Transmission Company

Dear Bert:

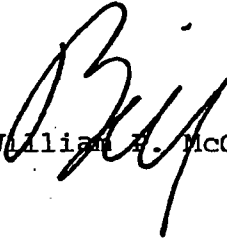
As you know, the ruling letter which we received from the Internal Revenue Service with respect to the acquisition of Wilcox Oil Company by Tennessee Gas Transmission Company is satisfactory in all respects. However, I would like specifically to point out to you that the stockholders of Wilcox will not be treated as receiving a dividend on those minimal expenses relating to the distribution of fractional shares which Wilcox will pay on their behalf. The shareholders of Wilcox will be treated in a very simple manner. All stock of Tennessee will be received tax free by them, and to the extent that any fractional share of Tennessee is considered to be received by them and sold by the transfer agent, they will recognize capital gain or loss.

In the above respect and in all other respects, the ruling letter is 100 per cent satisfactory to Wilcox and the stockholders of Wilcox and, presumably, to Tennessee Gas Transmission Company. We were very glad that we could provide you with the ruling letter in ample time for both corporations to study it prior to the stockholders' meeting.

Mr. Bert E. Lane
June 16, 1964
Page 2

As I am sure you know, it has been a pleasure representing you in the past, and we would like to wish you the best of luck in your association with Tennessee Gas Transmission Company. I am sure it will be a profitable and happy association for all parties concerned.

Sincerely yours,


William F. McClure

WPM-MS

LAW OFFICES OF
McCLURE & TROTTER

SUITE 405
SEVENTEEN TEN H STREET, N.W.
WASHINGTON 6, D. C.

298-7040

June 16, 1964

WILLIAM P. McCLURE
JOHN D. HECKERT
ROGER S. LEVITAN

HOUSTON OFFICE
TROTTER, CHILDS, FORTENBACH & McCLURE
JACK T. TROTTER
P. O. BOX 391
HOUSTON 1, TEXAS

Board of Directors
Wilcox Oil Company
Post Office Box 1440
Tulsa, Oklahoma 74101

Attention: Mr. Alvin Chapman, President

Gentlemen:

Pursuant to Plan of Reorganization entered into on the 13th day of May 1964, by and between Wilcox Oil Company, Tennessee Gas Transmission Company, and WXC Company, this letter is being written to set forth the opinion of the law firm of McClure & Trotter that the ruling received from the Internal Revenue Service, dated June 11, 1964, relating to the proposed reorganization, is exactly as desired by Wilcox Oil Company and the law firm of McClure & Trotter.

There is attached hereto a Tax Ruling Certificate signed by me on behalf of this firm, which has attached thereto the complete record of correspondence between the firm of McClure & Trotter and the Internal Revenue Service in connection with the aforementioned ruling.

Respectfully submitted,

McCLURE & TROTTER

William P. McClure

WPM-MS
Att.

LAW OFFICES OF
McCLURE & TROTTER
SUITE 405
SEVENTEEN TEN H STREET, N. W.
WASHINGTON 6, D. C.

298-7040

June 16, 1964

WILLIAM P. McCLURE
JOHN D. HECKERT
ROGER S. LEVITAN

HOUSTON OFFICE
TROTTER, CHILDS, FORTENBACH & McCLURE
JACK T. TROTTER
P. O. BOX 391
HOUSTON 1, TEXAS

TAX RULING CERTIFICATE

I, William P. McClure, of Messrs. McClure & Trotter, acted as attorney in fact for Wilcox Oil Company (Wilcox) in connection with the ruling described below, and do hereby certify that attached hereto are true copies of the following:

- a. Letter dated April 27, 1964, addressed to the Commissioner of Internal Revenue and signed by William P. McClure, requesting a ruling on behalf of Wilcox.
- b. Letter dated April 28, 1964, addressed to the Commissioner of Internal Revenue and signed by Roger S. Levitan of Messrs. McClure & Trotter, transmitting power of attorney to obtain the ruling referred to in Item a. above.
- c. Letter dated May 4, 1964, addressed to the Commissioner of Internal Revenue and signed by Roger S. Levitan, setting forth additional information in connection with the ruling referred to in Item a. above.
- d. Letter dated May 15, 1964, addressed to the Commissioner of Internal Revenue and signed by Roger S. Levitan, setting forth additional information in connection with the ruling referred to in Item a. above.
- e. Letter dated May 25, 1964, addressed to the Commissioner of Internal Revenue and signed by Roger S. Levitan, setting forth additional information in connection with the ruling referred to in Item a. above.

Tax Ruling Certificate
June 16, 1964
Page 2

- f. Letter dated June 11, 1964, addressed to William P. McClure and signed by Mr. Glenn Paschall, Chief, Reorganization Branch, Tax Rulings Division of the Internal Revenue Service, giving a ruling as requested in Item a. above.

WITNESS my hand this 16th day of June 1964.

William P. McClure

April 27, 1964

Commissioner of Internal Revenue
Washington 25, D. C.

Attention: T:R:R

In re: Tennessee Gas Transmission Company
and Wilcox Oil Company

Dear Sir:

We respectfully request a ruling that the proposed transaction described below constitutes a reorganization within the meaning of section 368(a)(1)(C) of the Internal Revenue Code of 1954 and that the receipt by the stockholders of Wilcox Oil Company (hereinafter referred to as Wilcox) of stock of Tennessee Gas Transmission Company (hereinafter referred to as Tennessee) will be received tax free under the provisions of section 354 of the Internal Revenue Code of 1954.

Wilcox is a Delaware corporation which is qualified to do business in the states of Arkansas, Colorado, Kansas, Louisiana, Montana, Nebraska, New Mexico, Oklahoma, and Texas

Commissioner of Internal Revenue
April 27, 1964
Page 2

and is engaged in the exploration, development, and production of oil and gas properties.

The authorized stock of Wilcox consists of 1,200,000 shares of common stock with a par value of \$5 per share, of which 694,234-3/5 shares are presently outstanding. The stock of Wilcox is traded on the New York Stock Exchange.

Tennessee is a Delaware corporation whose principal business is the production, refining, marketing, and transportation of oil and gas. It has authorized 60,000,000 shares of voting common stock with a par value of \$5 per share, of which 42,718,825 shares are outstanding. Tennessee is a publicly held corporation whose stock is listed on the New York Stock Exchange.

Tennessee has recently formed, for purposes of this transaction, WXC Company (hereinafter referred to as New Company), a Delaware corporation, which will be a wholly-owned subsidiary of Tennessee. It was organized with a capitalization of \$1,000 in cash. New Company will have only common stock outstanding (it now has ten shares of \$100 par value common stock) and no indebtedness.

It is now proposed to effectuate the plan of reorganization described below in order to obtain the benefits of greater diversification of activities, and operating economies which will be accomplished by elimination of duplication of efforts. The reorganization will also result in greater strength of total organization due to the combination of managerial and technical skills of the corporations involved.

Pursuant to an agreement and plan of reorganization, New Company will acquire all of the assets of Wilcox of whatever nature, real, personal, or mixed, tangible or intangible, except for the corporate charter, bylaws, stock books, and minute books of Wilcox, and an amount of cash which will be retained in order to pay the expenses arising out of the reorganization. The amount of cash retained in order to pay the expenses of the reorganization is not expected to exceed \$40,000.

Wilcox will receive from New Company in exchange for the transfer of Wilcox's assets, subject to its liabilities, 1,110,776 shares of \$5 par value common stock of Tennessee. New Company will have received these shares from

Commissioner of Internal Revenue

April 27, 1964

Page 4

Tennessee in exchange for additional common stock of New Company. Wilcox will then be liquidated and dissolved, and the stock of Tennessee which it then holds will be distributed to its shareholders on the basis of 1.6 shares for each one share of Wilcox stock. Such distribution will be effected by Tennessee Bank & Trust Company, Houston, Texas, to which Wilcox will deliver the certificates of the common stock of Tennessee received by it. No fractional shares of Tennessee stock will be issued to the holders of Wilcox stock, but, in lieu thereof, Tennessee Bank & Trust Company, Houston, Texas, acting as the agent of each stockholder of Wilcox who would otherwise be entitled to a fractional share of Tennessee stock and in accordance with instructions to be given by such stockholder, will either sell such stockholder's fractional interest for his account and remit to him the net proceeds or purchase for such stockholder's account a fractional interest so as to make a full share of Tennessee common stock.

Attached hereto are Exhibits A, Plan of Reorganization; B, Annual Report of Tennessee which contains the balance sheet as of December 31, 1963, and the consolidated income

Commissioner of Internal Revenue
April 27, 1964
Page 5

statement for the year ended December 31, 1963; and C, Annual Report of Wilcox which contains the balance sheet as of December 31, 1963, and the statement of income for the year ended December 31, 1963.

RULINGS REQUESTED

It is respectfully requested that rulings be issued with respect to the transaction described above substantially as follows:

(1) The proposed acquisition of substantially all the assets of Wilcox by New Company solely in exchange for a portion of the voting stock of Tennessee will constitute a reorganization as defined in section 368(a)(1)(C) of the Internal Revenue Code of 1954. No gain or loss will be recognized to Wilcox, New Company, or Tennessee as a result of the exchange of property for stock pursuant to the plan of reorganization as provided in sections 361(a) and 1032 of the Code.

(2) Under section 362(b) of the Code, the basis to New Company of the property acquired will be the same as the basis of the property in the hands of Wilcox as of the time

the acquisition is consummated.

(3) Under section 354(a) (1) of the Code, no gain or loss will be recognized to the shareholders of Wilcox upon the receipt of Tennessee common stock (including fractional shares to which they would be entitled) in exchange for the common stock of Wilcox.

(4) The basis of the Tennessee stock received by the shareholders of Wilcox (including fractional shares to which they would be entitled) will be the same as the cost or other basis of the Wilcox stock exchanged therefor as provided by section 358(a) (1) of the Code. The basis should be allocated proportionately to the whole and fractional shares received. Assuming the stock of Tennessee constitutes a capital asset in the shareholders' hands, any subsequent sale of a fractional share of stock will result in capital gain or loss subject to the provisions and limitations of subchapter P of chapter one of the Code, measured by the difference between the basis so allocated and the proceeds of the sale.

LEGAL ANALYSIS

In view of the fact that a wholly-owned subsidiary of Tennessee will acquire substantially all of the properties of Wilcox solely in exchange for the common voting stock of Tennessee and that the Tennessee stock will then be distributed in liquidation to the shareholders of Wilcox on a pro rata basis, the transaction will constitute a reorganization under section 368(a)(1)(C) of the Code and the receipt of the stock of Tennessee by the shareholders of Wilcox will be tax free under section 354 since they will receive solely Tennessee stock in exchange for their stock in Wilcox. The above-described exchanges will be in pursuance of a plan of reorganization since the proposed transactions will be agreed upon, approved by the Board of Directors of both corporations and by the stockholders of Wilcox. Edison Securities Corporation, 34 B.T.A. 1188 (1936), James E. Murrin, 24 T.C. 502 (1955).

Since the transaction will constitute a "C" reorganization, Tennessee, Wilcox, and the newly formed corporation will all be considered to be parties to the reorganization. Section 368(b)(2) of the Internal Revenue Code of 1954.

The requirements of continuity of business enterprises and stockholder interest will be met since the business of Wilcox will be continued by New Company, and none of the Directors of Wilcox have any knowledge that any substantial stockholder of Wilcox has any present intention of selling the stock received in the reorganization. John B. Lewis Estate, 10 T.C. 1080 (1948), aff'd 176 F. 2d 646, (1st Cir.-- 1949), Elsie W. Hill Estate, 10 T.C. 1090 (1948).

Section 356 will not be applicable to the proposed transaction since no cash will be distributed to the shareholders of Wilcox inasmuch as any cash retained by Wilcox and not used by it to pay reorganization expenses will be turned over to New Company and New Company will acquire the assets and liabilities solely for voting stock of Tennessee.

CONCLUSION

Accordingly, it is respectfully requested that rulings be issued substantially the same as those outlined above and that since the closing is scheduled to be held on July 21, 1964, a ruling be issued by July 1 in order that the rulings may be distributed to the officers of the companies involved.

Commissioner of Internal Revenue
April 27, 1964
Page 9

Please contact the undersigned or, in his absence, Mr. Roger S. Levitan, for the purpose of arranging a conference if for any reason it is contemplated that a favorable ruling will not be issued. Also, please contact the undersigned for any additional information.

An appropriate power of attorney will be submitted shortly.

Respectfully submitted,

McCLURE & TROTTER

William P. McClure

WPM-MS

Encs

April 28, 1964

Commissioner of Internal Revenue
Washington 25, D. C.

Attention: T:R:R

In re: Tennessee Gas Transmission Company
and Wilcox Oil Company

Dear Sir:

Attached is power of attorney in regard to
our request for a ruling which was filed with you
yesterday, subject as above.

Sincerely yours,

McCLURE & TROTTER

Roger S. Levitan

RSL-MS
Enc

5

May 4, 1964

Commissioner of Internal Revenue
Washington 25, D. C.

Attention: T:R:R: - N.B.

In Re: Tennessee Gas Transmission Company
and Wilcox Oil Company

Dear Sir:

In answer to the request for additional information made by Mrs. Baber, and in order to clarify certain of the information which was submitted in our ruling request dated April 27, 1964, the following information is submitted.

On page 2 of the ruling request, the following two paragraphs should be inserted in place of the last two paragraphs on that page:

"Tennessee, a Delaware corporation, and two of its subsidiaries own and operate pipe line systems for the transportation and sale or delivery of natural gas. Tennessee also has various subsidiaries which are engaged in the production, refining, and marketing of petroleum and petroleum products and in certain other non-utility businesses. It has authorized 60,000,000 shares of voting common stock with par value of \$5 per share, of which 42,718,825 shares were outstanding at December 31, 1963. Tennessee is a publicly held corporation whose stock is listed on the New York, Midwest, and Pacific Coast Stock Exchange.

"Tennessee will form, for the purposes of this transaction, WXC Company (hereinafter referred to as

May 4, 1966

Page 2

"New Company), as a Delaware corporation, which New Company will be a wholly-owned subsidiary of Tennessee. New Company will have 10 shares of common stock (par value, \$100 per share) outstanding and no indebtedness."

Neither Tennessee Gas Transmission Company nor Wilcox Oil Company will have any net operating loss carry-overs as of the date of closing.

Tennessee Gas Transmission Company, Wilcox Oil Company and the shareholders of Wilcox Oil Company will bear the expenses in connection with the reorganization for which they are legally liable. While the initial proposed plan of reorganization on page 20 indicates that WGC Company or Tennessee Gas Transmission Company will pay the expenses in connection with the liquidation and dissolution of Wilcox to the extent that such expenses are not covered by the reserve funds set up by Wilcox, the latest proposed plan of reorganization has changed this. Accordingly, each of the corporations and the shareholders will bear the expenses in connection with the reorganization for which they are legally liable, with the following possible exception.

Wilcox Oil Company will pay the charges of the Tennessee Bank and Trust Company, Houston, Texas, which will effect the distribution of Tennessee's stock to the stockholders of Wilcox in exchange for their stock. Necessarily, the distribution will include the exchange of fractional share interests. However, the shareholders will not be charged separately for the expense of exchanging their fractional interests.

There are many reasons for not charging the shareholders separately for this expense. First, the expense which would be necessary to allocate separately to the shareholders the cost of exchanging their fractional interest would possibly be greater than the cost of the service. Therefore, it is uneconomical to have a separate charge made to the shareholders for this service provided by the Tennessee Bank and Trust Company. In addition, this expense is one which might be considered as being as much an obligation of Wilcox as it is of the shareholders of Wilcox. Therefore, since this expense is de minimis, we do not believe

Commissioner of Internal Revenue
May 4, 1964
Page 3

that it would be worth while for either the Tennessee Bank and Trust Company or an Internal Revenue agent to attempt to impute this minimum cost to the shareholders separately.

Tennessee Gas Transmission Company files its returns with the District Director of Internal Revenue, Austin, Texas, and its account number is 74-1056569.

Wilcox Oil Company files its returns with the District Director of Internal Revenue, Oklahoma City, Oklahoma, and its account number is 73-0513380.

Attached hereto are two copies of the Plan of Reorganization which supersedes the prior plan submitted. The changes made to the prior plan are indicated.

Please call us if any further information is necessary.

Sincerely yours,

McCLURE & TROTTER

Roger S. Levitan

RSL:krs
Encs.

May 15, 1964

Commissioner of Internal Revenue
Washington 25, D. C.

Attention: T:R:R - N.B.

In re: Request for a ruling
Wilcox Oil Company

Dear Sir:

Enclosed are the final copies of the Plan of Reorganization. All changes have been indicated and do not appear to affect the request for ruling.

Sincerely yours,

McCLURE & TROTTER

Roger S. Levitan

RSL-MS
Enc

LAW OFFICES OF
McCLURE & TROTTER

SUITE 405
SEVENTEEN TEN H STREET, N. W.
WASHINGTON 6, D. C.

298-7040

May 25, 1964

WILLIAM P. McCLURE
JOHN D. HECKERT
ROGER S. LEVITAN

HOUSTON OFFICE
TROTTER, CHILDS, FORTENBACH & McCLURE
JACK T. TROTTER
P. O. BOX 391
HOUSTON 1, TEXAS

Commissioner of Internal Revenue
Washington 25, D. C.

In re: Tennessee Gas Transmission Company
and Wilcox Oil Company

Dear Sir:

Enclosed are two copies of Amendment No. 1 to
the latest Plan of Reorganization which was submitted on
May 15, 1964.

Briefly, this amendment permits Tennessee Gas
Transmission Company to issue additional shares of its
stock in connection with the acquisition by Tennessee or
its subsidiary or affiliated companies of other properties
or assets. This amendment was made because Tennessee may
issue additional shares of its stock for this purpose in
an unrelated transaction prior to the closing.

Accordingly, we do not believe that this will
in any way affect the tax-free character of the proposed
reorganization.

Sincerely yours,

McCLURE & TROTTER

Roger S. Levitan

RSL:krs

Enc.

b.c. Mr. Bert E. Lane
Mr. Alvin L. Chapman
Mr. Glenn Davis
Mr. Carl L. Miller

C O P Y

T:R:R:
NB

Mr. William P. McClure
1710 H Street, N.W., Suite 405
Washington 6, D. C.

June 11, 1964

In re: Wilcox Oil Company
(Account No. 73-0513380)
Tennessee Gas Transmission Company
(Account No. 74-1056569)

Dear Mr. McClure:

This is in reply to your request of April 27, 1964, for a ruling with respect to the Federal income tax consequences of the proposed transaction described. Additional information was furnished by Mr. Roger S. Levitan in letters dated May 4, 15 and 25, 1964. The relevant facts submitted are summarized below.

Wilcox Oil Company ("Wilcox") is a Delaware Corporation engaged in the exploration, development and production of oil and gas properties. It has outstanding 694,234 $\frac{3}{5}$ shares of common stock (\$5 par value), which stock is traded on the New York Stock Exchange.

Tennessee Gas Transmission Company ("Tennessee") is a publicly-held Delaware corporation which is engaged, directly and through its subsidiaries, in owning and operating pipe line systems for the transportation and sale or delivery of natural gas, the production, refining and marketing of petroleum and petroleum products, and in certain other nonutility businesses. As of December 31, 1963, Tennessee had outstanding, in addition to certain preferred stock, 42,718,825 shares of voting common stock (\$5 par value). Its stock is listed on the New York, the Midwest and the Pacific Coast Stock Exchanges.

The balance sheet of each of the corporations as of December 31, 1963, reflects substantial retained earnings. Neither corporation has any net operating loss carry-over.

In order to obtain the benefits of greater diversification of activities, and operating economies, it is proposed that the transaction described below be effectuated.

In re: Wilcox Oil Company
Tennessee Gas Transmission Company

Pursuant to a plan of reorganization, Wilcox will transfer all of its assets (except cash of not more than \$100,000 to be retained for the purpose of paying its reorganization and liquidation costs and expenses), subject to its liabilities, to a newly-formed Delaware corporation, WXC Company ("WXC"), a wholly-owned subsidiary of Tennessee. The Tennessee common stock so acquired will then be distributed to Wilcox's shareholders through an agent, Tennessee Bank & Trust Company (the "Bank"), in complete liquidation of Wilcox on the basis of 1.6 shares of Tennessee common stock for each share of Wilcox stock held, and Wilcox will be dissolved. After payment by Wilcox of its reorganization and liquidation costs and expenses out of the cash funds retained by it, any balance of cash remaining will be paid over to WXC.

No fractional shares of the Tennessee common stock will be issued to the shareholders in the exchange. In lieu thereof, the Bank, acting as the agent of each shareholder otherwise entitled to a fractional share, and in accordance with instructions to be given by such shareholder, will (i) sell his fractional interest for his account and remit to him the net proceeds, or (ii) purchase for such shareholder's account a fractional interest to be combined with his fractional interest so as to make a full share and deliver the certificate therefor against payment for the fractional interest purchased. All the Bank's charges will be paid by Wilcox as representing its costs of distributing the Tennessee stock, with no separate allocations of such charges being made to the shareholders in view of the additional charges which would be necessary in making such separate allocations, thus producing and uneconomical result.

None of the Directors of Wilcox have any knowledge that any substantial shareholder of Wilcox has any present intention of selling the Tennessee common stock to be received by him in the exchange. Each of the corporations and each of the shareholders will bear its or his own expenses in connection with the proposed transaction for which each is legally liable.

Based solely on the information submitted, it is held as follows:

- (1) The transfer by Wilcox of substantially all of its assets, subject to its liabilities, to WXC in exchange solely for voting common stock of Tennessee in

In re: Wilcox Oil Company
Tennessee Gas Transmission Company

accordance with the proposed plan described above will constitute a reorganization within the meaning of section 368(a)(1)(C) of the Internal Revenue Code. For the purpose of the rulings set forth herein, "substantially all" means at least 90% of the net fair market value of Wilcox's assets.

- (2) No gain or loss will be recognized to Wilcox upon the exchange of its assets solely for common stock of Tennessee (section 361(a)). Likewise, no gain or loss will be recognized to WXC or Tennessee upon the receipt by WXC of Wilcox's assets in exchange for common stock of Tennessee pursuant to the proposed plan.
- (3) The basis of the assets of Wilcox will be the same in the hands of WXC as in the hands of Wilcox immediately preceding the transfer (section 362(b)).
- (4) In accordance with section 354(a)(1), no gain or loss will be recognized to the shareholders of Wilcox on the exchange of their stock of Wilcox for common stock of Tennessee (including fractional shares, if any, to which they may be entitled).
- (5) Under section 358(a)(1), the basis of the Tennessee common stock (including any fractional shares to which the shareholders may be entitled) received in exchange for the Wilcox stock will be the same in the hands of the shareholders as the basis of their Wilcox shares exchanged therefor; and the holding period of the Tennessee common stock so received will include the period during which the Wilcox shares exchanged therefor were held, in accordance with and subject to the provisions of section 1223(1).
- (6) Upon the sale of fractional shares of the Tennessee common stock by the Bank acting on behalf of the Wilcox shareholders, gain or loss will be recognized to each shareholder entitled to such fractional share, measured by the difference between the amount of cash received and the basis of his stock properly allocable to the fractional share sold. Provided the stock is a capital asset in the hands of such shareholder, the

Mr. William P. McClure

-4-

In re: Wilcox Oil Company
Tennessee Gas Transmission Company

gain or loss will constitute capital gain or loss in accordance with the provisions and limitations of Subchapter P of Chapter 1 of the Code.

- (7) The accumulated earnings and profits of Wilcox will, on the effective date of the exchange, become earnings and profits of WXC for the purpose of determining the amount of earnings and profits available for the payment of dividends within the meaning of section 316 of the Code.

It is important that a copy of this ruling letter be attached to the Federal income tax return of each of the corporations involved for the taxable year in which the transaction covered herein is consummated.

Very truly yours,

(Signed) Glen Paschall

Chief, Reorganization Branch

CERTIFICATE

Pursuant to clause (vii) and clause (viii) of paragraph 9.1 of the Plan of Reorganization dated May 13, 1964, as amended on May 21, 1964, among WILCOX OIL COMPANY, TENNESSEE GAS TRANSMISSION COMPANY and W X C COMPANY, we, the undersigned, R. E. MCGEE, Senior Vice President, and M. H. COVEY, Secretary, of TENNESSEE GAS TRANSMISSION COMPANY (hereinafter called "TENNESSEE") do hereby certify:

1. The business and properties of TENNESSEE have not, since the date of the aforesaid Plan of Reorganization, been adversely affected in any material way as the result of any fire, accident or other calamity or act of God or the public enemy.
2. Since the date of said Plan of Reorganization, TENNESSEE,
 - (a) has not taken any action which would change in any material respect the nature of its business,
 - (b) has not authorized or made any split-up of its common stock or other changes in the rights of the holders of shares of its common stock, except for the issuance of additional shares of TENNESSEE stock in connection with the acquisition by TENNESSEE or its subsidiaries or affiliate companies of other properties or assets,

(c) has not declared or paid any dividend or made any other distribution to the holders of its common stock in excess of a regular quarterly dividend of 25¢ per share.

WITNESS our hands and the seal of TENNESSEE GAS TRANSMISSION COMPANY, this 21st day of July, 1964.

M. H. Zorley
Secretary

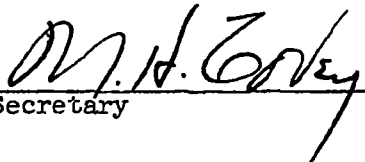
R. E. McGehee
Senior Vice President

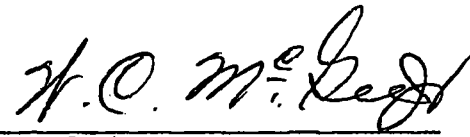
CERTIFICATE

We, W. C. MCGEE, JR., President, and M. H. COVEY, Secretary, respectively, of W X C COMPANY, a Delaware Corporation, (hereinafter called "W X C") hereby certify:

The representations and warranties made by W X C in Article 2 of the Plan of Reorganization, dated May 13, 1964, as amended on May 21, 1964, among WILCOX OIL COMPANY, TENNESSEE GAS TRANSMISSION COMPANY and W X C are correct in all material respects on and as of the date hereof with the same force and effect as though said representations had been made on and as of the date hereof.

WITNESS our hands and seal of W X C COMPANY this 21st day of July, 1964.


Secretary

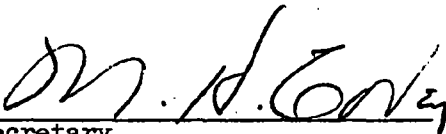

President

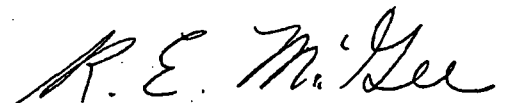
CERTIFICATE

We, R. E. MCGEE, Senior Vice President, and M. H. COVEY, Secretary, respectively, of TENNESSEE GAS TRANSMISSION COMPANY, a Delaware Corporation, (hereinafter called "TENNESSEE") hereby certify:

The representations and warranties made by TENNESSEE in Article 2 of the Plan of Reorganization, dated May 13, 1964, as amended on May 21, 1964, among WILCOX OIL COMPANY, TENNESSEE and W X C COMPANY are correct in all material respects on and as of the date hereof with the same force and effect as though said representations had been made on and as of the date hereof.

WITNESS our hands and the seal of TENNESSEE GAS TRANSMISSION COMPANY this 21st day of July, 1964.


Secretary


Senior Vice President

TENNESSEE GAS TRANSMISSION COMPANY

P. O. BOX 2511 • TENNESSEE BUILDING • HOUSTON, TEXAS 77001



July 21, 1964

Wilcox Oil Company
P.O. Box 1440
Tulsa, Oklahoma

Gentlemen:

I have acted as counsel for W X C Company (W X C) and Tennessee Gas Transmission Company (Tennessee) in connection with the acquisition by W X C of all of the assets and properties of Wilcox Oil Company (Wilcox) pursuant to a Plan of Reorganization dated May 13, 1964, as amended on May 21, 1964, among Wilcox, Tennessee and W X C.

Pursuant to clause (x) of paragraph 8.1 of the Plan of Reorganization, I approve for and on behalf of W X C and Tennessee, all actions, proceedings, instruments and documents required to carry out such Plan, as amended, or necessary or incidental thereto, and all other related legal actions taken by or on behalf of the parties to such Plan.

Very truly yours,

Vernon M. Turner
Associate General Attorney
Tennessee Gas Transmission Company

TENNESSEE GAS TRANSMISSION COMPANY

P. O. BOX 2511 • TENNESSEE BUILDING • HOUSTON, TEXAS



July 21, 1964

Wilcox Oil Company
P. O. Box 1440
Tulsa, Oklahoma

Gentlemen:

As Associate General Attorney for Tennessee Gas Transmission Company (hereinafter called "Tennessee"), and its affiliated and subsidiary companies, I am familiar with the proceedings taken in regard to the sale by Wilcox Oil Company of all of its properties and assets to W X C Company (hereinafter called "W X C") pursuant to the terms of a Plan of Reorganization dated May 13, 1964, as amended on May 21, 1964 (hereinafter called the "Plan of Reorganization") among Wilcox Oil Company, Tennessee and W X C.

In connection with the foregoing, I have examined all documents and corporate records which I have deemed necessary or advisable to render this opinion, and am of the opinion that:

- (a) W X C and Tennessee are each corporations duly organized and existing and in good standing under the laws of the State of Delaware.
- (b) All corporate and other proceedings required to be taken by and on the part of W X C to authorize it to enter into and carry out the Plan of Reorganization and to deliver the shares of the common stock of Tennessee deliverable thereunder and as provided therein have been duly and properly taken.
- (c) All corporate and other proceedings required to be taken by or on the part of Tennessee to authorize it to enter into the Plan of Reorganization and to carry out its obligations thereunder have been duly and properly taken.
- (d) The Plan of Reorganization has been duly executed and delivered by W X C and Tennessee and is a valid and binding obligation of each such corporation enforceable against each of them in accordance with its terms.
- (e) The shares of Tennessee stock delivered to Wilcox pursuant to the Plan of Reorganization are duly and validly issued and are

TENNESSEE GAS TRANSMISSION COMPANY

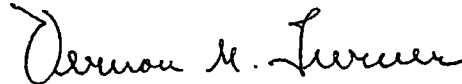
Wilcox Oil Company

-2-

July 21, 1964

full paid and nonassessable and W X C has the power and authority to deliver such shares free of any charges, liens or encumbrances to Wilcox as contemplated thereby, and such shares have been duly listed (subject to notice of issuance) on all exchanges upon which the outstanding shares of common stock of Tennessee are listed.

Very truly yours,



Vernon M. Turner
Counsel for Tennessee Gas
Transmission Company and
W X C Company

2
ARTHUR YOUNG & COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

U. S. A., CANADA, MEXICO, SOUTH AMERICA
GREAT BRITAIN, CONTINENTAL EUROPE
MIDDLE EAST, SOUTH AFRICA, AUSTRALIA

1500 FIRST NATIONAL BUILDING
TULSA

July 21, 1964

Tennessee Gas Transmission Company
WXC Company

Dear Sirs:

In connection with subparagraph (vi) of paragraph 8.1 of Plan of Reorganization dated May 13, 1964, between Wilcox Oil Company (Wilcox), Tennessee Gas Transmission Company and WXC Company included as Exhibit A to Wilcox Oil Company proxy statement for special meeting of stockholders held July 14, 1964:

1. The above mentioned proxy statement includes our opinion as independent public accountants on the financial position of Wilcox Oil Company at December 31, 1963 and the results of its operations for the five years then ended, as reflected in the balance sheet and summary of earnings included therein.

2. In connection with our annual examinations of the accounts of Wilcox, we have reviewed the company-prepared federal income tax returns for each of the calendar years 1960 through 1963. Reference is made to footnote (c) to the summary of earnings of Wilcox included in the proxy statement described above for information concerning federal income tax provisions for such years. In our opinion, such returns properly reflect the federal income taxes of Wilcox for each of the years covered thereby and, subject to examination by the Internal Revenue Service, no accrual for federal income taxes at December 31, 1963 is required.

3. We have not made an examination of the financial statements nor audited the accounting records of Wilcox Oil Company for any period subsequent to December 31, 1963. We have performed certain limited procedures as described in 4. below. These procedures would not necessarily reveal adverse or other changes of the types mentioned in 6. below. Since these procedures do not constitute an examination made in accordance with generally accepted auditing standards, we do not express an opinion on the results of operations for any period subsequent to December 31, 1963, nor on the financial position at any date subsequent to December 31, 1963.

4. The procedures referred to in 3. above consisted of the following:

July 21, 1964

-2-

- (a) The unaudited financial statements at March 31, 1964, and for the three months then ended, included in Exhibit A to Plan of Reorganization, and at June 30, 1964, and for the six months then ended, the latest available statements prepared by the Company, were read and compared with the financial statements at December 31, 1963 reported on by us and with the unaudited financial statements for the corresponding periods of the preceding year.
- (b) Officials responsible for financial accounting matters were questioned as to whether: (1) the various principal items in the unaudited financial statements were treated in conformity with generally accepted accounting principles and practices applied on a basis consistent with that of the periods reported on by us, (2) all adjustments necessary for a fair presentation of the financial position at March 31, 1964, and June 30, 1964, and the results of operations for the three month period ended March 31, 1964, and the six month period ended June 30, 1964, respectively, had been made, (3) any adjustments other than normal recurring accruals had been made during the six months ended June 30, 1964, (4) there was any material adverse change in the financial position or results of operations subsequent to December 31, 1963 up to July 21, 1964, (5) any substantial contingent liabilities or commitments, in addition to the three suits then pending as listed in paragraph 1.8 of Plan of Reorganization, existed at March 31, 1964 or July 21, 1964, or (6) all federal and state tax returns of Wilcox required to be filed on or prior to March 31, 1964, have been filed; all such returns required to be filed prior to July 21, 1964 have been filed; there is any deficit for the payment of taxes in respect of any return filed for any prior year; all liabilities of Wilcox for federal, state and local taxes for any period prior to March 31, 1964, (except ad valorem taxes for current year) have been paid or adequately provided for on the balance sheet at March 31, 1964, referred to in 4. (a) above.
- (c) The minute books of the Company were read up to the last recorded minutes of meetings of the stockholders, the Board of Directors and the Executive Committee which were dated July 14, 1964, July 14, 1964 and September 17, 1963, respectively.

July 21, 1964

-3-

5. Wilcox has incurred certain costs and expenses relating to or resulting from the Plan of Reorganization. Also, because of the Plan of Reorganization, certain costs and expenses heretofore incurred which under normal Wilcox accounting policies would be expensed pro rata over appropriate accounting periods have been charged to expense in the period to July 21, 1964.

6. The foregoing procedures and inquiries did not bring anything to our attention which gave us reason to believe that:

- (a) Such unaudited financial statements were not prepared in conformity with generally accepted accounting principles and practices applied on a basis consistent with that of the periods reported on by us,
- (b) Any material adjustments of such unaudited financial statements are required, except for the matter described in (c) below,
- (c) Except as set forth in or contemplated by the Plan of Reorganization and as commented upon in 5. above, during the period January 1, 1964 to July 21, 1964 there has been any material adverse change in the financial position or results of operations of Wilcox except that the secured note receivable of Wendell H. Sandlin is in default as to principal in the amount of \$475,000.01 and as to interest from July 1, 1964.
- (d) The representations of Wilcox in paragraph 1.8 of the Plan of Reorganization are not true on and as of this date.

The terms financial position and results of operations are used above in their conventional accounting sense, and they have the same meaning as in our opinion in the proxy statement and they accordingly relate to the financial statements of the business as a whole.

Yours very truly,

Arthur Young & Company



WILCOX OIL COMPANY

P. O. BOX 1440
TULSA, OKLAHOMA

July 21, 1964

W X C Company
P. O. Box 2511
Houston, Texas 77001

Gentlemen:

As Vice President and General Counsel of Wilcox Oil Company (hereinafter called "Wilcox") I am familiar with the proceedings taken by Wilcox to sell all of its properties and assets to W X C Company (hereinafter called "W X C") pursuant to the terms of a Plan of Reorganization, dated May 13, 1964, as amended on May 21, 1964 (hereinafter called the "Plan of Reorganization") among Wilcox, Tennessee Gas Transmission Company and W X C.


In connection with the foregoing, I have examined all documents and corporate records which I have deemed necessary or advisable to render this opinion, and am of the opinion that:

- (a) Wilcox is a corporation duly organized and existing and in good standing under the laws of the State of Delaware and upon date of execution of the Plan of Reorganization, above referred to, was qualified to transact business in the States of Arkansas, Colorado, Kansas, Louisiana, Montana, Nebraska, New Mexico, Oklahoma and Texas. Wilcox has subsequently lawfully withdrawn from all States except Kansas, Oklahoma, Texas and Louisiana.
- (b) Except as set forth in paragraph 1.8 of the Plan of Reorganization, I do not know of any material pending litigation to which Wilcox is a party defendant or of any material threatened litigation against Wilcox.
- (c) Wilcox has full power and authority to convey, assign, transfer and deliver its assets, properties, business and good will as provided in the Plan of Reorganization.

July 21, 1964

- (d) All corporate and other proceedings required to be taken by Wilcox so as to authorize it to carry out the Plan of Reorganization and to convey, assign, transfer and deliver its assets, properties, business and good will pursuant thereto have been duly and properly taken.
- (e) The vote of the stockholders of Wilcox taken at the Special Meeting of Stockholders held on July 14, 1964, together with the actions taken by the Board of Directors of Wilcox at the meeting held on May 13, 1964, have duly authorized the conveyance, transfer, assignment and delivery of the assets, properties, business and good will of Wilcox in exchange for shares of the common stock of Tennessee Gas Transmission Company upon the terms and conditions provided for in the Plan of Reorganization and such vote is binding upon all stockholders of Wilcox.

Very truly yours,


Glenn R. Davis
General Counsel for
Wilcox Oil Company



WILCOX OIL COMPANY

P. O. BOX 1440
TULSA, OKLAHOMA

July 21, 1964

Tennessee Gas Transmission Company
P. O. Box 2511
Houston, Texas 77001


W X C Company
P. O. Box 2511
Houston, Texas 77001

Gentlemen:

I have acted as counsel for Wilcox Oil Company (Wilcox) in connection with the sale by Wilcox of all its assets and properties to W X C Company (W X C) pursuant to a Plan of Reorganization dated May 13, 1964, as amended on May 21, 1964, among Wilcox, Tennessee Gas Transmission Company and W X C.

Pursuant to clause (iii) of paragraph 9.1 of the Plan of Reorganization, I approve for and on behalf of Wilcox, all actions, proceedings, instruments and documents required to carry out such Plan, as amended, or necessary or incidental thereto, and all other related legal actions taken by or on behalf of the parties to such Plan.

Very truly yours,

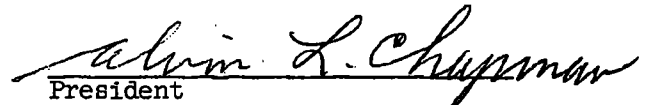

Glenn R. Davis
General Counsel

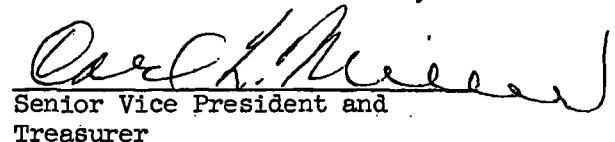
CERTIFICATE

We, the undersigned, ALVIN L. CHAPMAN, as President, and CARL L. MILLER, as Senior Vice President and Treasurer, of WILCOX OIL COMPANY, a Delaware Corporation, (hereinafter called "WILCOX") do hereby certify, as follows:

From March 31, 1964 to the date hereof, there has been no material adverse change in the condition, financial or otherwise, of WILCOX from that set forth in the Balance Sheet of WILCOX, dated as of March 31, 1964, annexed as Exhibit A to the Plan of Reorganization, dated May 13, 1964, as amended on May 21, 1964, among WILCOX, TENNESSEE GAS TRANSMISSION COMPANY and W X C COMPANY.

WITNESS our hands and seal of WILCOX OIL COMPANY, this 21st day of July, 1964.


President


Senior Vice President and
Treasurer

CERTIFICATE

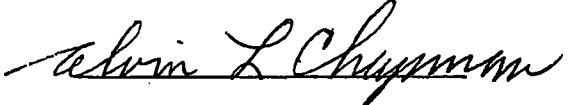


I, BERT E. LANE, Vice President and Secretary of Wilcox Oil Company, a Delaware Corporation, (hereinafter called "Wilcox"), do hereby certify as follows:

1. The resolutions adopted by the Board of Directors of Wilcox on May 13, 1964, and by its stockholders on July 14, 1964, certified copies of which have heretofore been delivered to Tennessee Gas Transmission Company (hereinafter called "Tennessee"), and W X C Company (hereinafter called "W X C"), remain in full force and effect as of the date hereof and have not been amended, repealed, rescinded or changed in any way whatsoever.

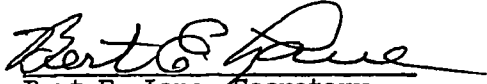
2. From May 13, 1964 to the date hereof there have been no amendments to the Articles of Incorporation or the By-Laws of Wilcox, true and correct copies of which have heretofore been delivered to Tennessee and W X C, except that the Board of Directors and the stockholders of Wilcox have authorized, subject to the closing under the Plan of Reorganization dated May 13, 1964 as amended on May 21, 1964 (hereinafter called the "Plan of Reorganization") among Wilcox, Tennessee and W X C, an amendment to Wilcox's Articles of Incorporation changing its corporate name to Lixco Company and the dissolution of Wilcox.

3. The officers of Wilcox who executed and delivered the Plan of Reorganization and the other documents executed and delivered on behalf of Wilcox in connection with the transactions contemplated by the Plan of Reorganization were duly elected and acting as such officers at the times the Plan of Reorganization and such other documents were executed

and delivered and are duly elected and acting as such officers on and as of the date hereof, and said officers (other than the undersigned) and their respective signatures are as follows:

<u>NAME</u>	<u>OFFICE</u>	<u>SIGNATURE</u>
Alvin L. Chapman	President	
Carl L. Miller	Senior Vice President and Treasurer	
Glenn R. Davis	Vice President and General Counsel	

WITNESS MY HAND and the seal of Wilcox Oil Company this 21st
day of July, 1964.


Bert E. Lane, Secretary

CERTIFICATE

We, the undersigned, ALVIN L. CHAPMAN, as President, and CARL L. MILLER, as Senior Vice President and Treasurer, of WILCOX OIL COMPANY, a Delaware Corporation, (hereinafter called "WILCOX") do hereby certify, as follows:

1. The representations and warranties made by WILCOX in Article 1 of the Plan of Reorganization, dated May 13, 1964, as amended on May 21, 1964, among WILCOX, TENNESSEE GAS TRANSMISSION COMPANY, a Delaware Corporation, (hereinafter called "TENNESSEE") and W X C COMPANY, a Delaware Corporation (hereinafter called "W X C ") are true and correct in all material respects on and as of this date, with the same force and effect as though such representations and warranties had been made on and as of this date, except as affected by the transactions contemplated in the Plan of Reorganization or transactions approved in writing by W X C or changes occurring after May 13, 1964 in the ordinary course of business.
2. From March 31, 1964 to the date hereof, except for the execution and delivery of the Plan of Reorganization and the transactions contemplated thereby, WILCOX has conducted its business and affairs only in their ordinary course, or as has been expressly agreed to in writing on behalf of TENNESSEE and W X C. During such period, WILCOX did not knowingly take any action, other than in the ordinary course of business, which would change the conduct of its business and affairs from the manner in which such business and affairs were

conducted from December 31, 1964 to May 13, 1964. For this purpose, the terms and phrases used above shall have the same meanings set forth in the Plan of Reorganization.

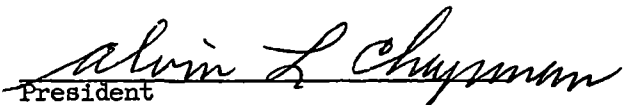
3. From May 13, 1964 to the date hereof, WILCOX has
 - (a) not declared or paid any dividend or made any distribution of its properties or assets to its stockholders or allowed the issuance of any additional shares of its stock, except for a dividend of 25¢ payable on each share of WILCOX common stock outstanding on May 1, 1964, such dividend having been paid on May 22, 1964,
 - (b) not made any changes in its Articles of Incorporation or By-Laws, except as provided for in the Plan of Reorganization,
 - (c) not granted further restricted stock options to purchase shares of its common stock,
 - (d) not increased from and after April 13, 1964, the rate or form or compensation payable to any officers or employees of WILCOX, except as permitted by clause (iv) of paragraph 5.1 of the Plan of Reorganization,
 - (e) not disposed of any of its items of inventory, properties or other assets except in the ordinary course of business,
 - (f) not incurred any indebtedness except in the ordinary course of business nor allowed any material adverse change to be made in its financial affairs, nor allowed any tax or other


liability of WILCOX to be extended by waiver of the statutes
of limitations or otherwise,

- (g) complied in all material respects with all applicable local,
state and federal rules, laws, and regulations, and
- (h) granted to W X C, TENNESSEE, and their respective representa-
tives free access to all of its properties and records in
accordance with clause (viii) of paragraph 5.1 of the Plan of
Reorganization.

4. From May 13, 1964 to the date hereof, no properties or assets of
WILCOX have suffered any destruction or damage by fire, explosion
or other calamity exceeding \$25,000.00 in value not covered by
insurance.

WITNESS our hands and the seal of WILCOX OIL COMPANY, this 21st day
of July, 1964.


President


Senior Vice President and
Treasurer

BILL OF SALE
(Rolling Stock)

THE STATE OF OKLAHOMA §
 ss:
COUNTY OF TULSA §

KNOW ALL MEN BY THESE PRESENTS: That,
WILCOX OIL COMPANY, a Delaware Corporation, (hereinafter called
"Vendor") for and in consideration of the sum of Ten Dollars (\$10.00) and
other good and valuable consideration to it cash in hand paid by W X C
COMPANY, a Delaware Corporation, (hereinafter called "Vendee"), the receipt
and sufficiency of which are acknowledged and confessed, has Granted, Bar-
gained, Sold and Delivered, and by these presents does hereby Grant, Bargain,
Sell and Deliver unto Vendee:

All of the automobiles, trucks, trailers, tractors and all
parts and accessories thereto described in Exhibit "A"
hereto attached, and made a part hereof by reference.

All of the aforesaid personal properties are conveyed by Vendor
to Vendee pursuant to a Plan of Reorganization dated May 13, 1964, between
Vendor, Tennessee Gas Transmission Company and Vendee; and Vendor binds and
firmly obligates itself to execute and deliver to Vendee such transfers of
certificates of title and registrations as are necessary under the laws of
the various states where such of the above described rolling stock may be
situated, in order to evidence in Vendee the full and absolute title to each
and all of the items of property listed on Exhibit "A".

TO HAVE AND TO HOLD the above described items of personal property
together with all and singular the rights and privileges in anywise appertaining
thereto, to Vendee, its successors and assigns, forever.

IN WITNESS WHEREOF, Vendor has caused this instrument to be executed
by the officers hereunto duly authorized, on this the 21st day of July, A.D.,
1964, at Houston, Texas.

ATTEST:


Secretary


WILCOX OIL COMPANY

By 
President

THE STATE OF TEXAS §

COUNTY OF HARRIS §

BEFORE ME, a notary public in and for said state, on this 21st day of July, 1964, personally appeared ALVIN L. CHAPMAN, to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its President and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.


Notary Public

ELSIE PECENA
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965

EXHIBIT "A"
(ROLLING STOCK)

Unit No	Description of Equipment	Year	Location	Certificate of Title Number	Location	Serial Number	State Reg.No.
<u>AUTOMOBILES</u>							
502	Chevrolet 4-door Sedan	1962	Bristow, Okla.	G344182	Oklahoma	21669K108596	ZA8096 (Okla.)
505	Chevrolet 4-door Sedan	1963	Tulsa, Okla.	G456761	Oklahoma	31869K112476	ZA8097 (Okla.)
508	Chevrolet 4-door Sedan	1963	Bristow, Okla.	G609738	Oklahoma	31669K152690	ZA8098 (Okla.)
<u>TRUCKS</u>							
487	Chevrolet 1/2 T. Pickup	1959	Stroud, Okla.	F131932	Oklahoma	3A59K109004	336-597 (Okla.)**
488	Chevrolet 1/2 T. Pickup	1959	Burton, Kansas	CV31398T	Kansas	3A59K131398	TRN3899 (Kan.)
492	Chevrolet 1/2 T. Pickup	1960	Stroud, Okla.	F447328	Oklahoma	OC144K113513	336-596 (Okla)**
495	GMC (With Winch) 1-1/2 T.	1961	Bristow, Okla.	G206355	Oklahoma	PN5363D	336-595 (Okla.)
496	Chevrolet 3/4 T. Pickup	1961	Stroud, Okla.	G206764	Oklahoma	1C254K109461	366-594 (Okla.)**
498	Chevrolet 2 T. Truck	1961	Stroud, Okla.	G220267	Oklahoma	1C633K42172	336-592 (Okla.)**
499	Chevrolet 1/2 T. Pickup	1959	Perry, Okla.	F129128A	Oklahoma	3A59K103090	336-591 (Okla.)
500	Chevrolet 1/2 T. Pickup	1962	Bristow, Okla.	G341082	Oklahoma	2C144K109577	336-590 (Okla.)
501	Chevrolet 1/2 T. Pickup	1962	Bristow, Okla.	G342257	Oklahoma	2C144K110082	336-589 (Okla.)
<u>TRAILERS</u>							
17	Homemade Semi-Trailer	1952	Stroud, Okla.	D917055	Oklahoma	D917055	15-351 (Okla.)
388B	Hobbs Semi-Trailer	1946	Stroud, Okla.	D146750	Oklahoma	70512	15-350 (Okla.)
405A	Homemade Pole Trailer	1946	Stroud, Okla.	D4034	Oklahoma	D40340TC	15-349 (Okla.)
411A	Homemade Pole Trailer	1952	Stroud, Okla.	D134166	Oklahoma	D1341660TC	15-348 (Okla.)**
<u>TRACTOR</u>							
497	Chevrolet (With Winch) 2 T Cat. & Chassis	1961	Stroud, Okla.	G215539	Oklahoma	1C633K127639	336-593 (Okla.)

**(77 + % Interest)

BILL OF SALE

(Insurance)

THE STATE OF OKLAHOMA |
 ss:
COUNTY OF TULSA |

KNOW ALL MEN BY THESE PRESENTS: That,

WILCOX OIL COMPANY, a Delaware Corporation (hereinafter called "Grantor"), for and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable considerations to it cash in hand paid by W X C COMPANY, a Delaware Corporation (hereinafter called "Grantee"), the receipt of which is acknowledged, and pursuant to a Plan of Reorganization dated May 13, 1964, between Grantor, Tennessee Gas Transmission Company and Grantee, has Granted, Bargained, Sold and Delivered, and by these presents does Grant, Bargain, Sell and Deliver unto the said Grantee, all of the policies of insurance and bonds described in Exhibit "A" hereto attached and made a part hereof, together with all claims accrued or to accrue thereunder, and all sums due or to become due unto Grantee therein and thereunder.

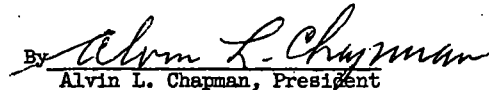
TO HAVE AND TO HOLD said policies of insurance and bonds to Grantee, its successors and assigns, forever.

IN WITNESS WHEREOF, this Bill of Sale is executed on this the 21st day of July, 1964, at Houston, Texas.

ATTEST:

WILCOX OIL COMPANY


Secretary

By 
Alvin L. Chapman, President

THE STATE OF TEXAS §

COUNTY OF HARRIS §

BEFORE ME, a notary public in and for said state, on this 21st day of July, 1964, personally appeared ALVIN L. CHAPMAN, to me known to be the identical person who subscribed the name of the maker thereof to the foregoing instrument as its President and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.


Notary Public

ELSIE PECENA
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965

EXHIBIT "A"
(INSURANCE AND BONDS)

<u>Coverage</u>	<u>Carrier</u>	<u>Policy No.</u>	<u>Amount of Coverage</u>	<u>Expiration Date</u>
<u>LIABILITY</u>				
Automobile Liability (Employee Owned Vehicles)	Travelers Indemnity Company	MV624605	BI \$50,000/100,00 PD 50,000	11-1-64
Comprehensive Automobile Liability and Physical Damage, Fire, Theft, CAD, VMM (Company Owned)	Travelers Indemnity Company	SLA836445	BI \$300,000/500,000 PD 100,000 Fire, Theft, CAD, VMM-Various Amounts	11-1-64
Liability and Property Damage	Travelers Indemnity Company	K&LG1393608	BI \$300,000/500,000 PD 100,000	1-1-65
<u>WORKMEN'S COMPENSATION</u>				
Workmen's Compensation	Travelers Insurance Company	VB1794054	Statutory Workmen's Compensation Including \$100,000. Employers' Liability covers all operations in states of Oklahoma, Kansas and Texas	1-1-65

Exhibit "A" Insurance and Bonds

<u>Coverage</u>	<u>Carrier</u>	<u>Policy No.</u>	<u>Amount of Insurance</u>	<u>Expiration Date</u>
<u>MISCELLANEOUS</u>				
Boilers & Machinery, Liability	Hartford Steam Boiler & Inspection Co.	173211	Oklahoma \$100,000 Texas 50,000	11-1-66
Waney Harjo Business Lease Creek Nation (20-16N-9E Creek County, Okla.)	Federal Insurance Company	9630073	575	Continuous
Sac & Fox Tribe Business Lease (Lincoln County, Oklahoma)	Federal Insurance Company	8014-69-90	500	12-31-68
Blanket Crime, Including Employee Dishonesty; Money and Securities; Forgery	Travelers Indemnity Company	BC1090605	100,000	9-10-66
Comprehensive DDD Policy (Excess over Blanket Crime Policy)	Travelers Indemnity Company	CDA1090604	\$100,000. Excess over Primary \$100,000	9-10-66
<u>FIRE AND EXTENDED COVERAGE</u>				
Fire, E.C., VMM on Filling Station and Business Building at 11th and Cheyenne, Tulsa, Oklahoma	House Insurance Company	18507	15,000	1-24-66
Fire, EC, V&MM on Petroleum Field Properties	Travelers Indemnity Company	M1042072	1,318,000	11-4-66
Fire, EC, V&MM on Office Building and Garage at 6th & Denver, Tulsa, Oklahoma	Providence Washington Insurance Company	F295179	369,200	10-1-68

EXHIBIT "A" Insurance and Bonds

Coverage	Carrier	Policy No.	Amount of Insurance	Expiration Date
<u>BONDS</u>				
U.S.A. Agricultural Lease Bond (625 Acres Sac and Fox Tribe Land, Lincoln County, Oklahoma	Federal Insurance Company	8014-01-09	\$ 600	1-1-68
Nation Wide Oil & Gas Lease Bond on Indian Lands	Federal Insurance Company	9680209	75,000	7-10-68
Blanket Oil & Gas Lease Bond on Oklahoma State Lands	Federal Insurance Company	7976891	15,000	1 1-3-68
Oil Well Bonds to City of Oklahoma City, Oklahoma: -				
Bisbee Lease	Federal Insurance Company	8014-69-89	10,000	1-6-69
Buxton Lease	Federal Insurance Company	8014-69-87	10,000	1-6-69
Haynes Lease	Federal Insurance Company	8014-69-88	10,000	1-6-69
Short Lease	Federal Insurance Company	8014-69-86	10,000	1-6-69
Texas Franchise Tax Bond	Federal Insurance Company	7987889	500	Continuous
Texas Superheavy or Oversize Permit Bond	Federal Insurance Company	8015-54-12	5,000	9-1-64
Supersedeas Bond to State of Okla- homa and Fred V. Shadid, H.F.V. Barkett, Ralph J. Shadid and E. M. Woody	Federal Insurance Company	8015-53-86	5,000	4-10-65

ASSUMPTION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS, that for good and valuable consideration, receipt of which is hereby acknowledged, W X C COMPANY, a Delaware Corporation, (hereinafter called "W X C") for itself, its successors and assigns, from and after the date hereof, hereby assumes and agrees to pay, perform and discharge all debts, obligations, contracts and liabilities of Wilcox Oil Company, a Delaware Corporation, (hereinafter called "Wilcox") and its officers and directors when acting in such capacities, except for any actions based upon misfeasance or malfeasance, and when such debts, obligations, contracts and liabilities of Wilcox are imputed by law to such officers and directors, of any kind, character or description, whether accrued, absolute, contingent or otherwise, all as the same shall exist at the date hereof.

IN WITNESS WHEREOF, W X C COMPANY has caused these presence to be executed and its corporate seal hereunto affixed this 21st day of July, 1964.

ATTEST:

M. H. Cook
Secretary

W X C COMPANY

By

W. C. Moore Jr.
President

THE STATE OF TEXAS |

COUNTY OF HARRIS |

BEFORE ME, the undersigned authority, on this day personally appeared W. C. Moore Jr., known to me to be the person whose name is subscribed to the foregoing instrument, as President of W X C COMPANY, a corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 21st day of July, 1964.

Elsie Pecena
Notary Public

ELSIE PECENA
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965

ASSIGNMENT AND ASSUMPTION

THE STATE OF OKLAHOMA |
 ss:
COUNTY OF TULSA |

KNOW ALL MEN BY THESE PRESENTS: That,

WILCOX OIL COMPANY, a Delaware Corporation (hereinafter called "Wilcox"), pursuant to a Plan of Reorganization dated as of May 13, 1964, between Wilcox, TENNESSEE GAS TRANSMISSION COMPANY, a Delaware Corporation, and W X C COMPANY, a Delaware Corporation (hereinafter called "W X C"), has conveyed to W X C all of its properties and assets subject to the assumption by W X C of all of Wilcox's liabilities, and it is the desire of Wilcox to evidence its assignment of all of its right, title and interest in and to certain agreements and contracts to which it is a party, and it is the desire of W X C to evidence its assumption and agreement to perform all of the obligations of Wilcox under such agreements.

NOW, THEREFORE, for and in consideration of the premises:

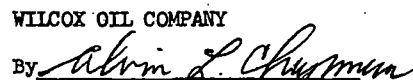
1. Wilcox hereby transfers, assigns and conveys to W X C all of its right, title and interest in and to all of the agreements and contracts set forth in Schedule A annexed hereto and all of its properties and interest therein and thereunder; and

2. W X C, as the assignee of Wilcox, hereby agrees to assume and perform all of the obligations of Wilcox under such agreements and contracts.

IN WITNESS WHEREOF, the parties hereto have executed this Assignment and Assumption on this 21st day of July, 1964, by each of their respective officers, hereunto duly authorized.

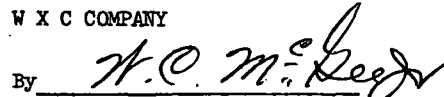
ATTEST:

Secretary

WILCOX OIL COMPANY
By 
Alvin L. Chapman, President

ATTEST:

Secretary

W X C COMPANY
By 

THE STATE OF TEXAS §
COUNTY OF HARRIS §

BEFORE ME, a notary public in and for said state, on this 21st day of July, 1964, personally appeared ALVIN L. CHAPMAN, to me known to be the identical person who subscribed the name of WILCOX OIL COMPANY to the foregoing instrument as its President and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.

Elsie Pecena
Notary Public

ELSIE PECENA
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965

THE STATE OF TEXAS §
COUNTY OF HARRIS §

BEFORE ME, a notary public in and for said state, on this 21st day of July, 1964, personally appeared W.C. McEee, Jr. to me known to be the identical person who subscribed the name of W X C COMPANY to the foregoing instrument as its President and acknowledged to me that he executed the same as his free and voluntary act and deed, and as the free and voluntary act and deed of such corporation for the uses and purposes therein set forth.

Elsie Pecena
Notary Public

ELSIE PECENA
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1965

EXHIBIT "A"

<u>BUYER</u>	<u>Date and Type (If other than natural gas or casinghead gas)</u>	<u>County</u>	<u>State</u>
1. Arkansas Louisiana Gas Co	December 18, 1962	Custer	Oklahoma
2. Arkansas Louisiana Gas Co	October 30, 1962 Ratified November 9, 1962 Amended February 18, 1964	Kingfisher	Oklahoma
3. Phillips Petroleum Co	September 23, 1962 Amended June 10, 1964	Lipscomb	Texas
4. Cabot Corp.	June 23, 1960	Lipscomb	Texas
5. Cabot Corp	August 22, 1961	Gray	Texas
6. Cities Service Gas Co	(i) April 27, 1961 (ii) February 7, 1945	Texas Texas	Oklahoma Oklahoma
7. Cities Service Gas Co	June 18, 1956	Grant & Alfalfa	Oklahoma
8. Cities Service Gas Co	April 17, 1959	Barber	Kansas
9. Cities Service Gas Co	November 20, 1958	Barber	Kansas
10. Colorado Interstate Gas Co	August 7, 1956 Amended July 22, 1960 Additional Agreement- August 18, 1960	Harper	Oklahoma
11. Davidor & Davidor	September 29, 1956 Amended February 5, 1963	Lincoln	Oklahoma
12. Kansas Gas Supply Co	January 24, 1961 Amended June 13, 1961	Kingman	Kansas
13. Kansas Gas Supply Co	December 17, 1962	Kingman	Kansas
14. Kerr-McGee Oil Industries	September 1, 1952	Creek	Oklahoma
15. Kansas Gas Supply Co	January 24, 1961	Kingman	Kansas
16. Michigan Wisconsin Pipe Line Co	December 18, 1958	Beaver	Oklahoma
17. Michigan Wisconsin Pipe Line Co	(i) October 4, 1960 and Supplemental Agmt (ii) October 4, 1960 (iii) Processing Agmt - July 1, 1962	Woodward Woodward Woodward	Oklahoma Oklahoma Oklahoma
18. Natural Gas Pipe Line Co	March 20, 1959	Beaver	Oklahoma
19. Northern Natural Gas Co	December 31, 1961 and Supplemental Agmt December 31, 1963	Harper	Oklahoma
20. Northern Natural Gas Co	October 19, 1962	Lipscomb	Texas

Exhibit "A" - continued

<u>BUYER</u>	<u>Date and Type (If other than natural gas or casinghead gas)</u>	<u>County</u>	<u>State</u>
21. Northern Oklahoma Gas Co	February 27, 1959 Amended August 12, 1960	Noble	Oklahoma
22. Oklahoma Gas and Electric Co	March 2, 1964 Amended June 9, 1964	Custer	Oklahoma
23. Oklahoma Gas and Electric Co	May 17, 1963	Okfuskee	Oklahoma
24. Oklahoma Illinois Pipe Line Co	(i) Pipeline Gas Purchase Contract July 5, 1962 (ii) Industrial Gas Purchase Contract July 5, 1952	Ellis Ellis	Oklahoma Oklahoma
25. Oklahoma Natural Gas Co	(i) October 12, 1961 as amended (ii) Processing Agreement September 16, 1963	Major Major	Oklahoma Oklahoma
26. Oklahoma Gas & Electric Co	Dover Hennessey Gas Products Plant-December 18, 1962 and Agreement January 9, 1963	Kingfisher	Oklahoma
27. Oklahoma Natural Gas Co	Dover Hennessey Gas Products Plant March 9, 1962	Kingfisher	Oklahoma
28. Panhandle Eastern Pipe Line Co	November 13, 1957	Beaver	Oklahoma
29. Panhandle Eastern Pipe Line Co	April 14, 1960 incorporat- ing Agreement of March 23, 1960	Beckham & Washita	Oklahoma
30. Panhandle Eastern Pipe Line Co	May 3, 1963	Woods	Oklahoma
31. Phillips Petroleum Co	(i) January 1, 1958 as amended July 2, 1962 and July 30, 1962 and August 9, 1962 (ii) January 1, 1958 as amended July 2, 1962 and July 30, 1962 and August 9, 1962 (iii) January 1, 1941 as amended July 2, 1962 (iv) Gathering System Use January 1, 1958	Gray Gray	Texas Texas
32. Phillips Petroleum Co	July 1, 1943	Oklahoma	Oklahoma
33. Service Petroleum Co	July 2, 1961	Noble	Oklahoma

Exhibit "A" - continued

<u>BUYER</u>	<u>Date and Type (If other than natural gas or casinghead gas)</u>	<u>County</u>	<u>State</u>
34. Shell Oil Co	(i) November 25, 1949 (ii) Elk City Gasoline Plant April 1, 1957	Beckham	Oklahoma
35. Sinclair Oil & Gas Co	Laverne Gas Products Plant September 1, 1962	Beaver	Oklahoma
36. Sinclair Oil & Gas Co	Dover Hennessey Gas Products Plant April 27, 1962	Kingfisher	Oklahoma
37. Sun Oil Co	Laverne Gas Products Plant May 6, 1959 as amended April 17, 1962	Beaver	Oklahoma
38. Sinclair Oil & Gas Co.	Moreland Gas Products Plant April 8, 1963 as amended July 11, 1963	Woodward	Oklahoma
39. Sinclair Oil & Gas Co.	O'Keene Gas Plant January __, 1964	Blaine	Oklahoma
40. Sinclair Oil & Gas Co	September 14, 1962	Pottawatomie	Oklahoma
41. Texaco, Inc.	April 27, 1962	Lincoln	Oklahoma
" "	May 22, 1956	"	"
" "	July 24, 1953	"	"
" "	July 24, 1953	"	"
" "	August 1, 1952	"	"
" "	August 1, 1952	"	"
" "	August 1, 1952	"	"
" "	April 1, 1941	"	"
42. Texaco, Inc.	September 15, 1959	Lincoln	Oklahoma
43. Warren Petroleum Co	July 21, 1954	Garvin	Oklahoma
44. W. R. Yinger	July 11, 1963	Hughes	Oklahoma
45. Continental Oil Co	Dover Hennessey Gas Products Plant June 1, 1962	Kingfisher	Oklahoma
46. Arkansas Louisiana Gas Co	April 28, 1961 as amended April 23, 1962	Beckham	Oklahoma
47. Humble Oil & Refining Co	Dover Hennessey Gas Products Plant September 18, 1961 as amended May 25, 1962	Kingfisher	Oklahoma

Exhibit "A" - continued

OPERATING AGREEMENTS - GAS PRODUCTS PLANTS

<u>OPERATOR</u>	<u>PLANT</u>	<u>DATE</u>	<u>COUNTY</u>	<u>STATE</u>
1. Humble Oil & Refining Co	Dover Hennessey	June 28, 1961	Kingfisher	Oklahoma
2. Sun Oil Co	Laverne	June 1, 1957 as amended	Harper	Oklahoma
3. Pan American Petroleum Corp	Mooreland	January 1, 1963 as revised	Woodward	Oklahoma
4. Pan American Petroleum Corp	O'Keene	November 1, 1963 as revised	Blaine	Oklahoma

MISCELLANEOUS CONTRACTS

<u>PURCHASER</u>	<u>TYPE</u>	<u>DATE</u>	<u>COUNTY</u>	<u>STATE</u>
1. Rock Island Oil & Refining Co	Crude Oil Sales	April 2, 1962	Beckham & Washita	Oklahoma
2. Pittsburg Screw & Bolt Corp	Coupling Thread Protector Sales	November 12, 1957		
3. Mid-Continent Pipe Line Co	Lease of Wilcox Pipeline Facilities to Mid-Continent	February 28, 1963	Payne	Oklahoma

GAS PURCHASE CONTRACTS

<u>SELLER</u>	<u>DATE</u>	<u>COUNTY</u>	<u>STATE</u>
1. Plateau Natural Gas Co	January 19, 1963	Reno	Kansas
2. Russell Coblo & W.D. Allen	March 10, 1959	Noble	Oklahoma
3. Simon Lebow	April 23, 1959	Noble	Oklahoma
4. Tenneco Oil Co	April 6, 1959	Noble	Oklahoma
5. Pure Oil Co	Aug. 8, 1961	Kingman	Kansas
6. Producers Pipeline & Gas Co	Sept. 1, 1958	Trego	Kansas

Exhibit "A" - continued

ELECTRIC ENERGY PURCHASE CONTRACTS

<u>COMPANY</u>	<u>DATE</u>
1. Indian Electric Co-Operative, Inc.	August 20, 1963
2. Oklahoma Gas & Electric Co	December 11, 1956
3. Indian Electric Co-Operative, Inc.	March 10, 1955
4. Summer-Cowley Electric Cooperative	September 1, 1963
5. North-Fork Electric Cooperative	_____, 1962
6. Western Light & Telephone Co	January 18, 1955
7. Central Rural Electric Cooperative	October 4, 1963
8. Southwestern Public Service Co	September 28, 1953
9. Central Kansas Electric Cooperative, Inc.	March 10, 1964
10. Oklahoma Gas & Electric Co	October 18, 1962
11. Kansas Gas & Electric Co	February 5, 1964
12. Oklahoma Gas & Electric Co	May 31, 1961
13. Oklahoma Gas & Electric Co	May 18, 1956
14. Oklahoma Gas & Electric Co	December 3, 1963
15. East Central Oklahoma Electric Cooperative	January 23, 1964
16. Central Rural Electric Cooperative, Inc.	April 16, 1960
17. Indian Electric Cooperative, Inc.	June 5, 1959
18. Indian Electric Cooperative, Inc.	March 5, 1959
19. Indian Electric Cooperative, Inc.	February 11, 1960
20. Indian Electric Cooperative, Inc.	February 11, 1960
21. Indian Electric Cooperative, Inc.	February 11, 1960
22. Indian Electric Cooperative, Inc.	February 11, 1960
23. Indian Electric Cooperative, Inc.	February 11, 1960
24. Indian Electric Cooperative, Inc.	February 11, 1960
25. Western Light & Telephone Co., Inc.	November 25, 1961
26. Indian Electric Cooperative, Inc.	March 25, 1959 (three contracts)
27. Phillips Petroleum Co	October 19, 1962

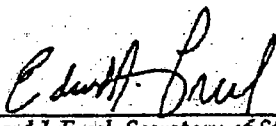
State of Delaware
Office of the Secretary of State

PAGE 1

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF DISSOLUTION OF "EPEC OIL COMPANY", FILED IN THIS OFFICE ON THE EIGHTEENTH DAY OF DECEMBER, A.D. 1998, AT 10 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.




Edward J. Freel, Secretary of State

0548802 8100

981490662

AUTHENTICATION: 9477980

DATE: 12-21-98

TGP0004268
TGP0004268
EPR0001321

**CERTIFICATE OF DISSOLUTION OF
EPEC OIL COMPANY
BY WRITTEN CONSENT OF SOLE STOCKHOLDER**

The undersigned, the President of EPEC Oil Company (the "Company"), a corporation duly organized and validly existing under the General Corporation Law of the State of Delaware, does hereby certify as follows:

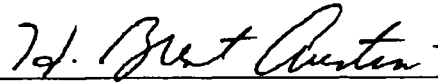
1. The dissolution of the Company has been duly authorized by the written consent of the sole stockholder of the Company in accordance with Sections 228 and 275(c) of the General Corporation Law of the State of Delaware.
2. The date the dissolution was authorized is December 16, 1998.
3. The following is a list of the names and addresses of the directors of the Company:

<u>NAME</u>	<u>ADDRESS</u>
H. Brent Austin	1001 Louisiana Houston, TX 77002

1. The following is a list of the names and addresses of the officers of the Company:

<u>NAME</u>	<u>OFFICE HELD</u>	<u>ADDRESS</u>
H. Brent Austin	President	1001 Louisiana Houston, TX 77002
Britton White, Jr.	Executive Vice President and General Counsel	1001 Louisiana Houston, TX 77002
C. Dana Rice	Vice President and Treasurer	1001 Louisiana Houston, TX 77002
David L. Siddall	Corporate Secretary and Associate General Counsel	1001 Louisiana Houston, TX 77002
Kelly J. Jameson	Assistant Secretary	1001 Louisiana Houston, TX 77002
Margaret E. Roark	Assistant Secretary	1001 Louisiana Houston, TX 77002

IN WITNESS WHEREOF, the undersigned has caused these presents to be executed this 16th
day of December 1998.



H. Brent Austin, President

[SEAL]

TGP0004270
TGP0004270
EPR0001323

**CERTIFICATE OF DISSOLUTION OF
EPEC OIL COMPANY
BY WRITTEN CONSENT OF SOLE STOCKHOLDER**

The undersigned, the President of EPEC Oil Company (the "Company"), a corporation duly organized and validly existing under the General Corporation Law of the State of Delaware, does hereby certify as follows:

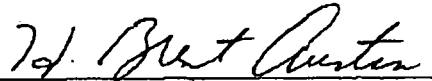
1. The dissolution of the Company has been duly authorized by the written consent of the sole stockholder of the Company in accordance with Sections 228 and 275(c) of the General Corporation Law of the State of Delaware.
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Margaret E. Roark	Assistant Secretary	1001 Louisiana Houston, TX 77002

IN WITNESS WHEREOF, the undersigned has caused these presents to be executed this 16th
day of December 1998.



H. Brent Austin, President

[SEAL]

TGP0004272
TGP0004272
EPR0001325



[Contents](#)



Section



Page



[Go to page](#)

Page View

**Bureau of Mines / *Minerals yearbook area reports: domestic 1963*
Year 1963, Volume III (1964)**

McDougal, Robert B.; Ham, William E.
Oklahoma, pp. 861-890

Page 865

THE MINERAL INDUSTRY OF OKLAHOMA

865

Loose sands of Loco field in Stephens County; the project would involve 15 producing wells and 8 injection wells. Sinclair Oil & Gas Co., on less than a 10-acre site on the Avant pool of Osage County, planned to use four wells as producing wells and one injection well; this test, in the Bartlesville sand, would be evaluated in 3 years. Some 15,300 acres of the Manning formation in Major County's Ringwood field were unitized for secondary recovery through waterflooding by Livingston Oil Co. in an effort to recover between 9 million and 20 million barrels of oil. The project was the first attempted in the Manning which lies about 6,900 feet below the surface.

A \$3 million engineering and physical sciences building at the Federal Bureau of Mines Petroleum Research Center in Bartlesville was dedicated on April 9.

Sinclair Research, Inc., dedicated its new \$1 million exploration and research center in Tulsa.

John Deere Chemical Co. completed a \$3 million expansion program to boost ammonia output at Pryor. In August, the company announced plans for another multimillion dollar expansion program, which, when completed by mid-1964, would double the plant's urea capacity.

Sunray DX Oil Co. began construction in September of a \$3.4 million solvent extraction unit at its Tulsa refinery. When completed about September 1964, the plant would replace several smaller ones and would have a 300-barrel-per-day capacity. The lube unit is the last in the company's 6-year \$30 million modernization program at the Tulsa refinery.

Sandlin Oil & Refining Co. purchased the Wilcox Oil Co.'s Bristow refinery and its Depew-to-Cushing pipeline in September.

Dewey Portland Cement Co., a division of Martin-Marietta Corp., announced in October that the plant at Dewey would close November 1; work would be shifted to the Tulsa plant, which was undergoing an expansion to double its present capacity. Earlier in the year, the company moved its headquarters from Kansas City to Tulsa.

Southwestern Gypsum Co. ceased production of gypsum for agricultural use near Weatherford. A new company, Republic Gypsum Co., Lubbock, Tex., began constructing a \$4 million wallboard plant at Duke in Jackson County. Crude gypsum, mined from a shallow deposit south of the plant, will be processed.

Armco Steel Corp. of Middletown, Ohio, announced in November that the largest continuous steel-casting unit in the Nation would be constructed at the Sand Springs works of the Sheffield Division. Completion was scheduled for late 1965.

The U.S. Army Corps of Engineers, Tulsa District, continued construction on two major reservoir projects—Enfauks Dam on the South Canadian River between Haskell and McIntosh Counties and Keystone Dam on the Arkansas River in Tulsa County. Oologah Dam on the Verdigris River in Rogers County was completed; dedication ceremonies were held at the dam on July 20.

Grand River Dam Authority was constructing Markham Ferry Dam project on the Grand River in Mayes County.

Water.—Water problems including long-range supply, quality, pollution, reuse, and treatment received increasing attention from Federal

▲ Top of Page



Contents



Section



Page

Go to page

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MARK S. COLEMAN
Executive Director



DAVID WALTERS
Governor

State of Oklahoma
DEPARTMENT OF ENVIRONMENTAL QUALITY

December 30, 1994

FEDERAL EXPRESS

Roberta K. Hirt (6H-SR)
U.S. Environmental Protection Agency
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Dear Ms. Hirt:

Enclosed are the Preliminary Assessment reports (including three "short" copies of each) and the only copies of the PAScore packets for the following sites: 10th Street Sludge site, located in Oklahoma County, Oklahoma; and Wilcox Oil Company site, located in Creek County, Oklahoma. These reports represent the second (2) and third (3) PAs out of eleven (11) scheduled for the 1995 fiscal year.

The 10th Street Sludge site was discovered during the reconstruction of 10th Street in Oklahoma City, Oklahoma. The waste of concern is petroleum acid sludge. An intermittent stream cuts through the waste. It is unknown when the sludge was deposited or where it originated. There may have been a small refinery in the area in the early 1900s.

The Wilcox Oil Company refinery operated in Bristow, Oklahoma, for at least 35 years. Wastes associated with the old refinery remain on site, and there are residents living on the site. Only a portion of the site has controlled access.

Please contact me if your office has any questions regarding this report. My office number is (405) 271-7071.

Sincerely,

A handwritten signature in dark ink, appearing to read "Rita R. Kottke".

Rita R. Kottke
Senior Environmental Specialist
Site Assessment Unit
Waste Management Division

Enclosures

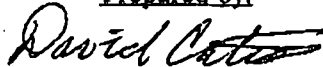
cc Lon Biasco, US EPA Region 6

PRELIMINARY ASSESSMENT
of the
WILCOX OIL COMPANY

located in
BRISTOW, CREEK COUNTY, OKLAHOMA

STATE OF OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

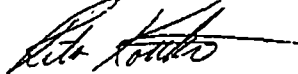
Prepared by:



David A. Cates, Environmental Specialist

Reviewed by:

Rita Kottke, Senior Environmental Specialist



Approved by:

Hal Cantwell, Environmental Specialist Supervisor



December 15, 1994

Table of Contents

Topic	Pages
I. Introduction	3
II. Site Description, Operational History, and Waste Characteristics	3 - 7
III. Pathway and Environmental Hazard Assessment	7 - 13
IV. Summary and Conclusion	14
V. Figures	15
Figure 1: Vicinity Map	16
Figure 2: Site Map	17
Figure 3: Surface Water Migration Route	18
Figure 4: Well Location Map	19
VI. Photodocumentation	20 - 24
VII. List of References	25 - 26
VIII. References	27

I. Introduction

The State of Oklahoma Department of Environmental Quality (DEQ) is tasked by the U.S. Environmental Protection Agency (EPA), as authorized by CERCLA and as amended by SARA, under the Multi-Site Cooperative Agreement (CA# V-00645-01) to conduct a Preliminary Assessment (PA) of the Wilcox Oil Company site, (CERCLIS ID # not yet assigned). The primary purpose of this PA is to assess the immediate or potential threat of wastes at the site that may impact public and environmental health and to collect information sufficient to support a decision regarding the need for further action under CERCLA/SARA. The scope of this investigation includes the review of available information from DEQ and other State agencies' files, a comprehensive target survey, and a site reconnaissance.

II. Site Description, Operational History, and Waste Characteristics

Site Description

The original site of the Wilcox Oil Company refinery is located in the NE/4 NW/4 NW/4 of Section 29-T16N-R9E (IM) Creek County, Oklahoma, along the east side of the St. Louis and San Francisco railroad right of way and is situated about 0.75 miles northeast of the Bristow City Hall (References 1; 2; Figures 1, 2, 3). The railroad extends northeast-southwest through the NW/4 NW/4 of section 29. Another feature of the area is Sand Creek which flows to the southeast across the NW/4 of Section 29. Coordinates of the site are 35° 50' 31.39" north latitude and 96° 23' 02.05" west longitude (Reference 3).

Operations at the oil refinery site began in the 1920's and the property was sold by Wilcox Oil Company on November 1st, 1963 (References 4; 5E; 6J; 6K). It is assumed that the company operated the refinery for all of this 35 to 40 year time period. Most of the equipment and storage tanks which remained on site in 1963 were auctioned and have been salvaged for scrap iron by private land owners (Reference 5E). After conducting the PRP search and the site reconnaissance, it was found that the Wilcox Oil Company actually owned more land than was originally considered to be the site, as indicated by the Sanborn Fire Insurance Map for Bristow (References 2; 6J; 6K; 6M; 7). It was determined that the size of the site should be expanded to include approximately 75 acres north of Sand Creek in the N/2 NW/4 and 40 acres in the NW/4 NE/4 of Section 29.

A tank farm with 50,000 barrel storage tanks and surface impoundments existed on the east 80 acres of the expanded site (NE/4 NW/4 & NW/4 NE/4 of Section 29) (References 2; 5E). Most of the tank farm area is currently owned by Mr. Phil Elias of Bristow, Oklahoma; home address unknown (Reference 5E). It is rural/undeveloped

land just outside the city limits of Bristow Oklahoma, and there are no structures or storage tanks currently on this part of the site (Reference 2). On the north the land is separated from the east-west section line county road by a barbed wire fence which has an unlocked gate. The gate is located at the north quarter corner of Section 29 where a lease road enters the property, trending south along a topographic high. Another entrance to the Elias property is located along the west side where a lease road extends southeast from a private drive which trends south from the north section line road. An area of about 2.5 acres in the northwest corner of the tank farm area is fenced. This is believed to be a gas pipeline compressor station (Reference 5S). A pipeline easement extends to the southeast from this location (Reference 2). It is marked with flagging and identifiable as a cleared path about twenty five feet wide. A south trending creek is located along the eastern portion of the Elias property (Reference 2). The eastern part of the property drains to the south and southeast while surface drainage in the west is to the southwest and south (Reference 2; Figure 1). The eastern 1/4 of the property is heavily wooded (Reference 2). While a tree line is present along the southern fenced property boundary and trees are randomly scattered elsewhere, most of the remaining areas of the property are covered with grasses and brush (Reference 5). The land to the south is cleared of trees and is probably used for agricultural purposes, either farming or for grazing cattle (Reference 2).

The original refinery site, which is located inside the fenced area just east of the railroad right of way, is currently owned by Jack and Arthur White and covers approximately 13 acres (References 1; 6A; 6L; 7). The White's property, which is completely fenced on all sides with a locked gate entrance on the north side, is located within a rural/underdeveloped setting just northeast of Bristow (Reference 2). The east-west section line road marks the north boundary of the property. The west side borders the railroad right of way. On the east side is a private drive extending south from the section line road. About 400 feet south of the section line road the fence angles southwest from the private drive then turns south after crossing a small creek and continues to Sand Creek. The southern border of the property is marked by the fence's position along the north bank of Sand Creek. The total area is about 18 acres, which is larger than what is described on their deed (13 acres, more or less) due to the fact that the fence extends all the way to Sand Creek (References 2; 5E).

Four storage tanks (12,500 gallons each) and an abundant number of pipe pieces and scrap iron are present on the White's property (Reference 2). There are several brick structures remaining on the west side near the railroad right of way. One of the old facility structures located on the north side next to the section line road is being used as a residence. Concrete tank, tower and facility foundations are present at numerous places. A small south trending creek is located along the east side of the White's property. Surface drainage is to the east and south (Reference 2; Figure 1). Trees and dense vegetation are present along the banks of the creeks and on the west side of the property. The remnants of several tanks, which had been salvaged for scrap iron, are

present (References 2, 5E).

The property bordering the railroad right of way on the west is owned by the Bristow First Assembly of God church (Reference 6B). The southern boundary of the church property is Sand Creek. The western and northern boundaries are believed to be the section lines. There are no fences. A gravel drive enters the property from the northeast corner to a gravel parking lot north of the church building itself (Reference 2). The building west of the church is a residence (Reference 5R). South of the church is an unoccupied mobile home which is to be used as a residence (Reference 5R). Two storage sheds are present near the mobile home. The ground is covered with mowed grass except for the parking lot and for trees located along the bank of Sand Creek. The church property drains to the west and south (Reference 2; Figure 1).

There are no schools or day-care centers near the site (References 2; 5R). There are three residences considered to be on site (References 2; 5E; 5Q; 5R). A residential area of Bristow is located just south of the White's property across Sand Creek (Reference 2). Four residences are located just north of the east-west section line road which marks the northern extent of the refinery site (Reference 2). Activities at the site involve domestic activities associated with the residences; salvaging of scrap iron from the remaining refinery equipment on the White's property; activities associated with the church; hunting on the Elias property; and occasional dirt work on all the properties (References 2; 5Q; 5R; 5S).

Operational History

The Wilcox Oil Company operated a crude oil refinery from the 1920's to early 1960's (References 4; 6). It was operated as a pilot project from about 1920 to 1928 at 1,000 barrels of oil per day by Riley Petroleum Company (Reference 4). The Sanborn Fire Insurance Map shows the various components of the facility (Reference 7). A modern skimming and cracking plant was constructed in 1929 which had an operating capacity of 4,000 barrels of crude oil per day (BOPD) (Reference 4). The main components of the new system consisted of a skimming plant, cracking unit, and redistillation battery with a vapor recovery system and continuous treating equipment (Reference 4). The crude oil was brought directly from the field, which eliminated storage and handling facilities but resulted in crude with high bottom sediment and water (b. s. & w.) (Reference 4). It is assumed that Wilcox Oil Company expanded operations at some later date since they acquired the former Lorraine Refinery facility west of the railroad and the tank farm area to the east (References 4; 6). Wilcox Oil Company acquired the original site (NE/4 NW/4 NW/4 of Section 29) on October 11, 1928, from A. A. Rolleston (Reference 6J). The company sold the original site plus the expanded areas totaling about 110 acres, more or less, to Wendel Sandlin on November 1, 1963 (Reference 6K). Wilcox Oil Company no longer operates in Oklahoma (Reference 5O). It is believed that this company merged with Tenneco Oil Company in 1967 (References 5O; 6). Tenneco operates in Oklahoma and is "in good standing" with the Secretary of State (Reference

50). Jack and Arthur White acquired the original refinery site from J. M. and Kinis Bankston on March 27, 1973 (References 6A; 6L).

DEQ received positive responses to its inquiries concerning access to the site from the current owners who, according to Oklahoma County Assessor's Office, are Messrs. Jack and Arthur White, Mr. Phil Elias, and the Bristow First Assembly of God church (References 6; 8). An on site reconnaissance was conducted by DEQ on December 16, 1994 (Reference 2). There are no existing complaints regarding the site in the Creek County Health Department files or records from other state institutions including the Corporation Commission, the Water Resources Board, and the Department of Environmental Quality (References 5J; 5K; 5L; 5M; 5N).

Waste Characteristics

The raw crude oil contained high percentages of bottom sediment and water (b. s. & w.), that was separated and represents the initial component of the waste stream at the site. The suspected waste stream components are: b. s. & w. (i.e., tank residues & brine); acid and caustic sludges; lead (sodium plumbite, Na_2PbO_2); coke; elemental sulfur; and possibly solvents (References 2; 4). Waste volumes are estimated to be large, i.e., at 1 % b. s. & w., the 4,000 BOPD refinery capacity would result in a waste stream of 40 barrels per day of waste if operated at capacity. The coke production was reported to be 7 to 8 tons per month which was transported off site by railroad and sold (Reference 4). The sodium plumbite was used as a Doctor solution additive for gasoline odors (Reference 4). Other potential contaminants such as the products (naphtha, gasoline, kerosine, fuel oil, and furnace oil) and raw crude oil are excluded under CERCLA (References 4; 9).

The soil survey classification for the site is oil-waste land which indicates that the area was impacted in 1950 by oil and salt water wastes from oil wells (Reference 10). This classification corresponds to miscellaneous land types which are gullied and eroded and are almost bare of vegetation. Comparison of aerial photos taken in 1941 with one flown in 1991 shows that there is quite a bit more vegetation currently (References 3B; 3E). Several surface impoundments containing oily sludge totaling about 4 acres in area are visible on both photos in the NE/4 NW/4 of Section 29 (References 3; 3B; 3E; Photo 1).

About 6.5 acres of asphalt-like material (presumably tank bottoms) is present within the storage tank retention berms located in the 80 acre tank farm area (References 3; 3F). The original refinery site (the White's property) contains some refinery equipment in various states of disrepair and several brick structures (References 3; 1; 7). An area barren of vegetation about 2 acres in size (200 by 400 feet) is present in the south central portion of the White's property (References 3; 3F; Photo 2). Coke and asphalt-like material is scattered over the ground surface in two areas about 1 acre (200 by 200 feet) each in size (References 3; 3F; Photo 3). What appears to be tank bottom sediment and

oily sludge was observed in one remnant tank bottom (Reference 3; Photo 4). This material is presumed to be present in the remaining four tanks on this site and in the bermed areas, totaling about 1 acre in size (Reference 3; 3F). The church's property has several areas, totaling about 5,000 square feet in size that have barren to sparse vegetation (Reference 3). Apparently, some oily waste was discovered on site about 2 feet below ground level when the church installed lateral lines (Reference 5U). Due to the evidence presented above, it will be assumed in this investigation that approximately 15.5 acres of the on site surface has been contaminated with hazardous substances.

III. Pathway and Environmental Hazard Assessment

Groundwater

The Barnsdall Formation outcrops at the Wilcox Oil Company refinery site and potentially receives ground water recharge from downward infiltration of precipitation falling on the ground surface (Reference 11). The Barnsdall Formation is a bedrock aquifer but is not considered to be a Principal Ground Water Resource by the Oklahoma State Department of Health (Reference 11). The site is in close proximity to an alluvial aquifer located less than one half mile to the south (Reference 11).

The alluvial deposits consist of wedge shaped layers of sand, silt, clay, and gravel. These deposits are found along Sand and Little Deep Fork Creeks and range from 0 to 100 feet in thickness (Reference 11). The Barnsdall Formation is approximately 200 feet thick at the site and consists of massive to thin beds of coarse to fine grain sandstone, irregularly interbedded with sandy to silty shale (Reference 11).

There is no indication that the site is located in an area of karst terrain (Reference 11; Figure 1). There are no faults mapped at the site (Reference 11). The soil survey has mapped the site as oil-waste land (Reference 10), indicating contamination at the ground surface. The Stephenville and Darnell fine sandy loam series (sloping) are the soils most likely associated with the site prior to being impacted by oil-field activities (Reference 10). These soils are well drained and are present from shallow to moderate depths (Reference 10). Sandstone outcrops are fairly common (Reference 10). Runoff is slow to moderate and internal drainage is moderate to rapid (Reference 10). The average annual precipitation is 37.19 inches (Reference 10) and the recharge to ground water is estimated to be about 10 per cent of the precipitation (Reference 11); thus, it is 3.7 inches per year.

The upper part of the Barnsdall Formation and the alluvial aquifer are unconfined, with a shallow water table, and are very susceptible to ground water contamination by potential wastes or contaminated soils at the site (Reference 11). Depth to the shallowest water bearing formation is less than 25 feet (Reference 11). However, a depth of sixty feet was reported for the first water saturated sandstone in a domestic water well

located in the SW/4 SW/4 SW/4 of Section 20-T16N-R9E which is less than a quarter mile north of the site (Reference 11). Recharge to the shallow part of the Barnsdall Formation at the site and discharge of ground water to the alluvial aquifer to the south are probable contamination mechanisms occurring at the site (Reference 11). Since shale beds occur within the Barnsdall Formation, recharge to the deeper part of the aquifer is probably restricted (Reference 11). However, pumpage from this zone could cause leakage of ground water from the strata above (Reference 11). Thus, the deep part of the Barnsdall Formation is also susceptible to ground water contamination by potential wastes or contaminated soils at the site. Two abandoned oil exploration wells located less than a quarter mile to the southeast of the site may represent potential routes for ground water contamination of the deeper parts of the Barnsdall aquifer (Reference 11). Two water wells, one of which is contaminated with petroleum, were drilled to depths around 200 feet on the White's property (References 5E; 5H). They have been abandoned and plugged (References 5H; 5Q). The integrity of the plugging is suspect (Reference 5H); therefore, these wells may act as conduits for contamination to reach the deeper parts of the aquifer. There may be an unplugged refinery well located south of the church since an open six inch casing has been observed there, and two wells are indicated on the Sanborn Fire Insurance map (References 3; 5R; 7).

The site lies just northeast of Bristow, Oklahoma. Generally, the majority of the population in the area of interest is served by public water supplies from the City of Bristow, but some residences have private water wells within the four mile study radius of the site (References 12; 13; Figure 4). The City of Bristow obtains its water supply solely from wells in the Barnsdall Formation and the Vamoosa-Ada aquifer (References 2; 5A; 13). The nearest water well, which is a domestic well 110 feet deep, is located on site, south of the church (References 2; 5R; 5U; Figure 2). However, this well, which was perforated at 40 feet in a shallow water zone, has been abandoned as a drinking water source because of contamination from petroleum (References 5R; 5U). It has not been plugged, however, and could be put into operation (References 5; 8U). The Sanborn Fire Insurance Map shows two refinery water wells on either side of the railroad (Reference 7). Two deep wells have been drilled on the White's property but were plugged and abandoned because one became contaminated with petroleum waste and the other one had collapsed casing (Reference 5E; 5H). The residences on site are presently connected to city water via a 2 inch line (Reference 5E; 5H; 5R). The nearest active drinking water well is within one quarter mile north of the site (References 11; 13; Figure 2; 4), and serves an estimated population of 2.68 (Reference 13). It is 230 feet deep and produces water from sandstones in the lower part of the Barnsdall Formation (Reference 11). It is assumed that the vast majority of residences in the study area utilize municipal water; however, since most domestic wells are located outside the city, these wells are assumed to be sources of drinking water (References 11; 13; Figure 4). The total population served by private wells is described in the table below. The numbers were arrived at by multiplying the number of wells by the estimated average number of persons (2.68) within each household in Creek County (Reference 14).

Private Wells

Distance from Site (mi)	# of Wells	Est. Population Served by Private Wells
On-site	1	2.68
0 - 1/4	1	2.68
1/4 - 1/2	0	0
1/2 - 1	4	10.72
1 - 2	25	67.00
2 - 3	20	53.6
3 - 4	29	77.72
Total	80	214.4

There are eight active public water wells distributed across two study radius zones that make up the City of Bristow Municipal Water System (References 5A; 13). Bristow obtains its water supply solely from wells that are within the study area (Reference 5F). Two municipal wells were located about one quarter mile south and southwest of the site (References 11; 13). They were approximately 200 feet deep and produced from the Barnsdall Formation; but they have been abandoned (References 5A; 13). However, Well #7, the one located less than 1/4 mile southwest of the site was not plugged but has a welded steel cap and is capable of producing. The nearest active municipal well is located almost one mile southwest of the site (References 5A; 13). It also produces from deep sandstones of the Barnsdall Formation (Reference 5A; 13). There are no surface water intakes in the system which serves 4,300 people of Bristow and 116 people of Slick, Oklahoma (References 13; 15). There are four water storage towers within the distribution system (Reference 13). This is a blended system in which two large capacity wells (200 gpm) and one small capacity well (50 - 90 gpm) are produced together during 24 hour periods (Reference 13). The specific wells are changed periodically. Under this scheme, one well provides more than forty per cent of the daily water supply but not more than forty per cent of the total annual production (Reference 13). The population served by each well is apportioned according to the estimated annual production capacities of the individual wells (Reference 13). Well #14 is located in the 1/2 to one mile radius zone and the other municipal wells are located in the one to two mile zone. Thus, the apportioned population served by Well #14 is located in the 1/2 to one mile radius zone, while the rest of the population is placed in the one to two mile zone. A public well in the one to two mile radius zone serves the 50 residents of the Evergreen

Trailer Park (Reference 13). The 50 residents of the Fogle Mobile Home Park formerly used a well, which was located in the one to two mile radius zone, but they are currently using city water (Reference 13). The status of this well is unknown. The 116 residents of the Slick Rural Water Association also obtain their water supply from Bristow (Reference 13). Considering the 4,416 people served by the 8 wells of the Bristow Municipal Water System and the 50 people of the Evergreen Trailer Park served by one well, the total population served by public wells (4,466 people) is described in the table below (Reference 13). The one municipal well which is abandoned but not plugged is also included in the table.

Public Wells

Distance from Site (mi)	# of Wells	Est. Population Served by Public Wells
On-site	0	0
0 - 1/4	1	0
1/4 - 1/2	0	0
1/2 - 1	1	165
1 - 2	8	4301
2 - 3	0	0
3 - 4	0	0
Total	10	4466

There are no Well Head Protection Areas within a four mile radius of the Site (Reference 5I). As a result of historical practices at the site, a release of hazardous substances from the Wilcox Oil Company refinery site to the groundwater is suspected. In fact, ground water contaminated by petroleum has been observed in a well on site (References 3; 5R; 5U). The private wells located outside the city limits of Bristow are assumed to be drinking water supply wells. Those wells close to the site which produce from the shallow ground water are at considerable risk of contamination, as in the case of the well on the church's property. However, wells that produce from the deeper zones in the Barnsdall Formation are at less risk of contamination because of the presence of shale beds between the contaminated zone above and the water producing zone below (Reference 11). The nearest of the domestic wells that utilize shallow ground water for drinking purposes are located more than 1/2 mile away in an up-gradient direction, and the wells within 1/2 mile produce from the lower part of the aquifer. Therefore, the

residences served by these wells are considered secondary targets. The population served by public wells are also considered secondary targets due to the distance of the wells from the site. Since the church's well on site is not currently being used for drinking water and since the well located within 1/4 mile north of the site produces from the deeper parts of the Barnsdall Formation, these wells are not considered to be primary targets.

Surface Water

The topography in the vicinity of site is relatively flat being situated on the noses of several south trending highs (Reference 2; Figure 1). There are two south trending tributaries of Sand Creek on site (Reference 5; Figure 1). Sand Creek, which marks the southern boundary of the western part of the site is a small perennial tributary of the Little Deep Fork Creek and flows southeasterly across the NW/4 of Section 29 (Figures 1). Sand Creek enters the Little Deep Fork about 3.5 miles downstream from the PPE (Figure 3). The probable point of entry (PPE) into Sand Creek is on site and occurs in the SE/4 NW/4 NW/4 of Section 29-T16N-R9E (IM) in Creek County, (Figures 1; 2; 3). The 15 mile target distance ends in the Little Deep Fork Creek just south of Slick, within Section 20-T15N-R10E (IM) of the same county (Reference 16; Figure 3). A mean annual flow rate of 806 cfs was recorded at gaging station #2435, which is located on the Deep Fork River in the NW/4 SW/4 of Section 20-T14N-R12E of Okmulgee County, down stream from the confluence with the Little Deep Fork Creek (Reference 17). This was the nearest available information on flow rate. Assuming that less than half the flow at the gaging station is attributed to the Little Deep Fork, then the maximum flow for the Little Deep Fork at the confluence would be about 400 cfs. Using the same reasoning, the maximum flow of Sand Creek at the confluence with the Little Deep Fork would be approximately 200 cfs. However, there are two tributaries that enter the Little Deep Fork after the Sand Creek confluence (Skull and Chicken Creeks) and before the 15 mile target distance (Reference 16; Figure 3). Two additional creeks flow into the Little Deep Fork after the 15 mile end point. Assuming that all five tributaries have similar flow characteristics, then the maximum flow of Sand Creek at the confluence with the Little Deep Fork would be 50 cfs. However, the creek, which is shown as a perennial stream on the topographic map (Reference 16; Figure 1), may not flow at times during the late summer months (Reference 5P).

The normal annual precipitation in the region of the site is about 37.19 inches per year (Reference 10). Portions of the site are located within the 100 year flood plain which is located along Sand Creek and the south trending tributary on the east side of the White's property (Reference 18). There are no drinking water intakes located within the 15 mile target distance (Reference 15).

Sand Creek is considered by the State of Oklahoma to be in the "habitat limited aquatic community" subcategory of the fish and wildlife propagation beneficial use and within the "secondary body contact" category of the recreational beneficial use (Reference 19). The

Little Deep Fork Creek is placed in the "warm water aquatic community" subcategory of the fish and wildlife propagation beneficial use and within the "primary body contact subcategory for recreational beneficial use (Reference 19).

Habitats of the endangered and threatened species listed below are known to occur in Creek County and may also be associated with the 15 mile target distance (Reference 20). Although the location of the site is near an urbanized area (Figures 1; 3), it is possible that these species would be found in the vicinity of the site (Reference 20). However, since no sightings have been observed or reported, all species listed below are considered secondary targets (References 2; 23).

Species	Federal Status
Bald Eagle	Endangered
Interior least tern	Endangered
Peregrine falcon	Endangered
Piping plover	Threatened
Cerulean warbler	Category 2 Candidate
Loggerhead shrike	Category 2 Candidate
Prairie mole cricket	Category 2 Candidate
Arkansas River speckled chub	Category 2 Candidate
Texas horned lizard	Category 2 Candidate
Western Snowy plover	Category 2 Candidate
Fissa sedge (Carex fissa)	Category 2 Candidate

There are about 30 miles of wetland frontage associated with the 15 mile target distance (Reference 21). The nearby Sand Creek and Little Deep Fork Creek have a potential for contamination from the site. In fact, a seep was identified in Sand Creek just west of the church property (Reference 2; 5R). Also, the oily sludge flowing out of the surface impoundments in the NE/4 NW/4 of Section 29, which have had their berms recently cut by bull dozer, will likely reach Sand Creek by surface drainage (Reference 2).

Soil Exposure

The site is an abandoned crude oil refinery located near residential areas (Reference 2; Figure 1; 3). The presence of soil contaminated by hazardous substances is assumed to be about 15.5 acres because of evidence found during the site reconnaissance (Reference 2). There are three residences located on site (Reference 2). The White's property, encompassing about 18 acres, is completely enclosed with a fence, and has the only controlled access on the site (Reference 2). There are about eight people living on site and an additional 11 people living within 200 feet of the site (Reference 2). These

people are considered as primary targets. The site is inactive so there are no workers employed at the facility (Reference 2). There are no schools or day-care centers within 200 feet (Reference 2). The estimated total population within 1 mile of the site is 2,393. This number is based on a house count taken during the site reconnaissance, the average number of persons (2.68) per household, and the Geographical Exposure Modeling System (GEMS) data (References 2; 14; 22). Several types of activities occur at the site including: occasional earth work; salvaging scrap iron; domestic activities associated with the residences on site; activities associated with the church; and some hunting (References 5; 8S). The Oklahoma Natural Heritage Inventory has no records of terrestrial sightings of rare species within 5 miles of the site (Reference 23).

Air

An air release is suspected since there were unusual odors observed during the site visit (Reference 2). The prevailing wind direction is from the north during the months of December through February and from the south the rest of the year (Reference 10). There is an estimated population of 8 persons who live in residences on site (Reference 2). Habitats of the endangered and threatened species listed under the surface water pathway are considered secondary targets (Reference 23). The estimated population and wetland acreage within the four mile radius of the site is described in the table below (Reference 24).

Distance from Site (mi)	Est. Population	Est. Wetland Acreage
On-site	8	2*
0 - 1/4	54	4.5
1/4 - 1/2	495	7
1/2 - 1	1,836	9
1 - 2	2691	65
2 - 3	1,017	145
3 - 4	517	112
Total	6,616	342.3

* - estimated.

There are an estimated 2 acres of wetlands present on site when the expanded site area is considered (Reference 2). Vegetation suggesting the presence of wetlands (cattails) was observed during the site reconnaissance in one surface impoundment and there are wetlands associated with Sand Creek (Reference 2; 23).

IV. Summary and Conclusion

The Wilcox Oil Company operated a refinery outside of the city of Bristow in Creek County, Oklahoma, for an estimated period of 35 to 40 years. As a result of this practice, ground water at the site has been adversely affected by potentially hazardous substances associated with the site. However, the private wells within the study area are located either in areas served by municipal water systems; located at relatively safe distances and up-gradient from the site; or produce from the deeper part of the Barnsdall Formation below shale beds. Therefore, the residences served by these wells are considered secondary targets. The population served by public wells are also considered secondary targets due to the distance between the wells and the site.

Sand Creek receives suspected contaminated runoff from the site so the associated wetlands would be primary targets. The habitats of threatened or endangered species and the warm water aquatic community "fishery" of the Little Deep Fork Creek are considered secondary targets. An air release is suspected due to the odors detected during the site reconnaissance. Contaminated soil is assumed because of the barren areas and stressed vegetation observed during the site reconnaissance. The residents on site are considered primary targets under both these pathways. Also, residents within one quarter mile are considered primary targets under the air pathway. Considering the fact that there are primary targets associated with the air, surface water, and soil pathways; and because subsurface contamination of ground water and soils at the site have been observed, a Site Inspection is recommended in order to better characterize the site and to determine whether threats to human health and the environment exist.

V. Figures

Figure 1: Vicinity Map

Nearest well

Nearest residences

Site

PPE

1-mi. Radius

December 15, 1994

Wilcox Oil Company

Wilcox Oil Company

Figure 3: Surface Water Migration Route

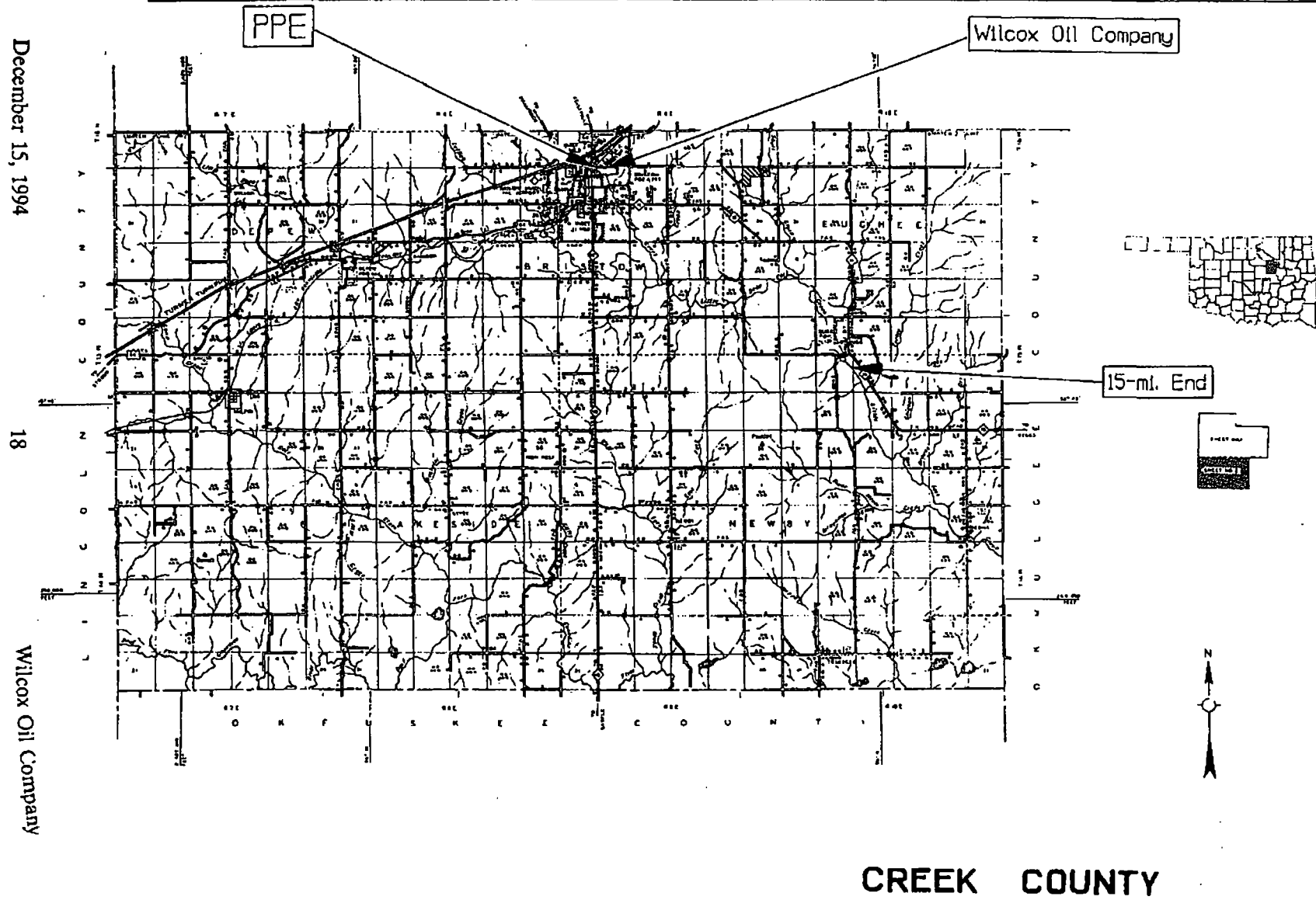
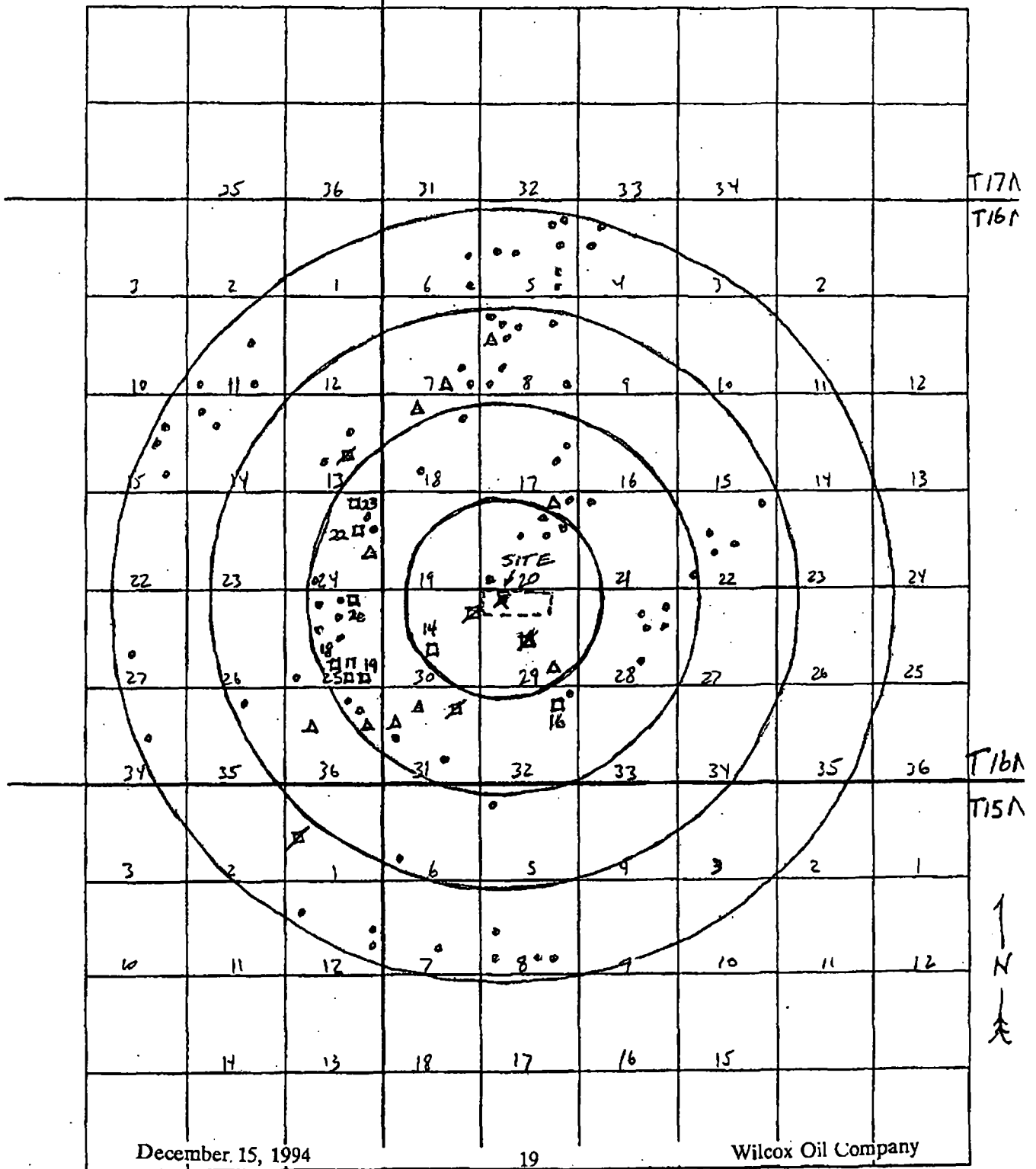


FIGURE 4



• - DOMESTIC
 Δ - PUBLIC
 □ - MUNICIPAL
 ABANDONED MUNICIPAL
 R8E R9E

Wilcox Oil Co.

VI. Photodocumentation

December 15, 1994

20

Wilcox Oil Company

KMI0000024

K.K.
Photographer: Karen Khalafian
Date: December 16, 1994

(David)
Witness: David Cates
Direction: North



Comments: Photograph #1 (matches slide #21). This photo shows the oily sludge in the surface impoundment on Mr. Elias's property (in the NE/4 NW/4 of Section 29).

December 15, 1994

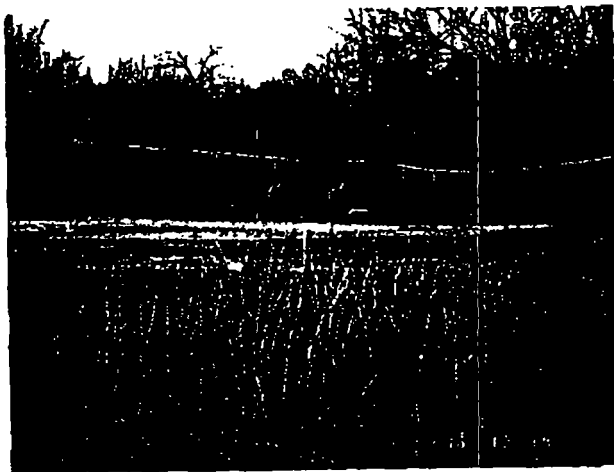
21

Wilcox Oil Company

KMI0000025

K.K.
Photographer: Karen Khalafian
Date: December 16, 1994

DAC
Witness: David Cates
Direction: Southeast



Comments: Photograph #2 (matches slide #8). This photo shows the area of contaminated soil in the south central portion of the White's property (NW/4 NW/4 of Section 29).

December 15, 1994

22

Wilcox Oil Company

KMI0000026

K.K.
Photographer: Karen Khalafian
Date: December 16, 1994

DAE
Witness: David Cates
Direction: East



Comments: Photograph #3 (matches slide #12). This photo shows the coke and asphalt-like material covering the ground on the White's property (NW/4 NW/4 of Section 29).

December 15, 1994

23

Wilcox Oil Company

KMI0000027

K.K.
Photographer: Karen Khalafian
Date: December 16, 1994

DAC
Witness: David Cates
Direction: East



Comments: Photograph #4 (matches slide #6). This photo shows the oily sludge in the bottom of a partially salvaged tank located on the White's property (NE/4 NW/4 NW/4 of Section 29).

December 15, 1994

24

Wilcox Oil Company

KMI0000028

County Clerk - Creek Co
222 E. Dewey Rm 203
County Courthouse
Sapulpa, OK 74066-4208
Phone 918-224-0278

Highway to Tulsa
OK-97 exit #215 Sapulpa/Sand Springs
(R on 9th/OK-97)
L on E. Dewey to 222



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06



Site Name: Wilcox Oil Company refinery

CERCLIS ID#: Not Assigned yet OK0001056324

Alias Site Names: _____

Address: 10th and Bryant Streets

City/County or Parish/State/Zip Code: City of Bristow City / Creek County / Oklahoma

Report Type, Date, and Author: PA/ December 15, 1994/ ODEQ

RECOMMENDATION

<input type="checkbox"/> 1. No Further Remedial Action Planned (NFRAP)	<input checked="" type="checkbox"/> 2. Further Investigation Needed Under Superfund
	<input type="checkbox"/> PA <input type="checkbox"/> HRS Priority: <input type="checkbox"/> High
	<input checked="" type="checkbox"/> SI <input type="checkbox"/> RA <input type="checkbox"/> Low
	<input type="checkbox"/> ESI <input type="checkbox"/> RI/FS
	<input type="checkbox"/> Other: _____
<input type="checkbox"/> 3. Action Deferred to: <input type="checkbox"/> RCRA <input type="checkbox"/> NRC	To be performed by: _____

NOTIFY AUTHORITY:

<input type="checkbox"/> Removal	<input type="checkbox"/> RCRA	<input type="checkbox"/> TSCA	<input type="checkbox"/> CAA	<input type="checkbox"/> SMCRA
<input type="checkbox"/> Remedial	<input type="checkbox"/> State	<input type="checkbox"/> NPDES	<input type="checkbox"/> NRC	<input type="checkbox"/> Resource Trustee: _____
<input type="checkbox"/> CERCLA Enforcement	<input type="checkbox"/> Federal Facility	<input type="checkbox"/> UIC	<input type="checkbox"/> SPCC	<input type="checkbox"/> Other: _____
SEND COPIES TO:	<input checked="" type="checkbox"/> BE-E	<input type="checkbox"/> 6W-SP	<input type="checkbox"/> ASTOR	<input checked="" type="checkbox"/> State Agency

SUPERFUND SITE STRATEGY RECOMMENDATION
Wilcox Oil Company

DISCUSSION: The Wilcox Oil Company is a 75 acre inactive refinery site. The site is believed to have operated as a refinery from the 1920s until the late 1960s. Most of the equipment on the site was salvaged or sold as scrap iron in the 80s. Potential sources from historic operations include a tank farm of 50,000 barrel storage tanks and surface impoundments; however, no equipment remains on site. Sources currently present include: 6.5 acres of asphalt material, 2 areas of coke and tank bottom sludge, and several areas of contaminated soil.

The following summary is based on HRS analysis of the site. Ground water is used as a primary source for drinking water in the area and potential contamination of the drinking water aquifer does exist. Surface water drains from on site run-off directly into a perennial stream. Several areas that are considered sensitive environments exist along the surface water distance limit that could be threatened by hazardous substance migration. Three residences exist within the site boundaries. Due to the residential areas being nearby, a potential threat from the hazardous waste migration, via soil exposure and air migration pathways, exists.

Due to the large area of hazardous sources and the potential impact on human health and the environment, a Site Investigation (SI) is recommended for the Wilcox Oil Company. The SI should initially focus on historic operations to determine if the hazardous substances present are excluded from CERCLA based on the Petroleum Exclusion clause.

APPROVALS:

Report Reviewed by:
(Site Assessment Manager)

Lon Biasco

Signature: _____

Date: 1/11/95

Disposition Recommended by:
(Section Chief)

Eddie A. Sierra

Signature: _____

Date: 1/11/95

Disposition Approved by:
(Branch Chief)

Betty Williamson

Signature: _____

Date: 1/11/95

Reference 11

MEMORANDUM

November 8, 1994

To: Rita Kottke (Senior Environmental Specialist), Waste Management Division, Site Assessment Unit.

From: David Cates (Environmental Specialist), Waste Management Division, Site Assessment Unit.

Re: Hydrogeology and Ground Water Use. Site: Wilcox Oil Company Refinery. Location: Bristow (NE/4 NW/4 NW/4 of Section 29, Township 16 North, Range 9 East of Creek County, Oklahoma).

Regional Hydrogeology

Principal ground water resources in Creek County, as mapped by Johnson (1983), include alluvial and terrace deposits where present throughout the county and the Pennsylvanian age Vamoosa-Ada aquifer in the west. The alluvial and terrace deposits are unconsolidated while the Vamoosa-Ada is considered a bedrock aquifer. Older Pennsylvanian rocks, including the Barnsdall Formation, produce ground water for municipal, domestic and industrial supplies in the central and eastern part of the county.

Quaternary age alluvial aquifers are the youngest in Creek County. Alluvial deposits are wedge shaped layers of sand, silt, clay, and gravel found along the Deep Fork and Cimarron Rivers and their major tributaries. Sediment is continually being eroded, reworked, and redeposited by the rivers and streams. Alluvial deposits range from 0 to 100 feet in thickness for the Deep Fork and Cimarron Rivers, and less for minor streams (Oakes, 1959).

Terrace deposits were formed when ancient streams deposited alluvium consisting mostly of sand, silt, clay, and gravel. Since the ancient streams were the ancestors of the Deep Fork and Cimarron Rivers, terrace deposits are located adjacent to these present-day rivers and streams, but at higher elevations. Like the younger alluvium, the composition and thickness of terrace deposits can vary greatly over short lateral distances.

Water suitable for domestic purposes can be found in the alluvial and terrace aquifers. Ground water in these aquifers is usually found under unconfined (water table) conditions and is susceptible to contamination from surface sources. Alluvial and terrace sediments are moderately permeable and wells yield about 25 to 50 gallons of water per minute (gpm) (Bingham and Moore, 1983).

Underlying the alluvial and terrace deposits in Creek County is bedrock assigned to the Virgilian and Missourian Series of the Pennsylvanian age. These strata outcrop at the surface with the progressively younger beds exposed to the west. The Pennsylvanian strata strike north-south and regional dip is westerly about 30 to 90 feet/mile (Oakes, 1959). However, east dips are encountered around surface folds and faults.

Most of the surface faults in Creek County trend northwest to southeast. They are several miles long with up to 100 feet of vertical displacement which decreases with depth (D'Lugosz et al., 1986). Larger subsurface faults trending northeast to southwest exist at depth but have no direct influence on the near surface ground water hydrology except possibly in the very eastern part of the county. The surface faults, however, may retard ground water flow or provide conduits for rapid recharge depending on the degree of fracturing, brecciation and shearing of the near surface rocks along the fault zones.

The Vamoosa-Ada aquifer consists of, in ascending order, the uppermost part of the Barnsdall Formation, the Tallant Formation, the Vamoosa Formation, the Ada Group and the lower part of the Vanoss Group. The Vamoosa Formation and the Ada Group make up the bulk of the aquifer. The Vamoosa-Ada strata outcrop in the western one third to one half of Creek County and are predominantly composed of red and brown coarse to fine grain well sorted sandstones interbedded with dark red sandy to silty shale. Individual sandstone beds range in thickness from 5 to 60 feet and tend to be either thick and lenticular or thin with large lateral extent. Chert conglomerates and coarse grained sandstones are present near the base of the Vamoosa Formation in the southern part of the county. Oakes (1959) reported that sandstone percentage, bed thickness, and grain size tend to decrease to the north. The thickness for the aquifer ranges between 200 in the south to between 500 and 800 feet elsewhere (Johnson, 1983).

Because of their resistance to weathering the sandstones form east facing escarpments which are a few miles long or, in some cases, extend across the county. The intervening valleys are underlain by silty sandstones and shales. The land is covered by grasses, scrubby blackjack and oak trees.

Ground water under unconfined conditions exists in the outcrop area of the aquifer and for a short distance west of the point where the aquifer is overlain by less permeable rocks. However, confined conditions generally exist at depth even under the outcrop areas because of the presence of shale beds. The occurrence and movement of ground water is controlled by regional and local geologic structures, lateral and vertical distribution of sandstone and shale units, and the physical character of the rocks. The physical characteristics also control the hydraulic properties of the aquifer and are directly related to sedimentary source and depositional environment.

The average hydraulic conductivity for the Vamoosa-Ada aquifer is 3 ft/day based on well test data and an average value for storage coefficient for the confined part of the aquifer is 0.0002 (D'Lugosz et al., 1986). Specific yield for the unconfined part of the aquifer was estimated by D'Lugosz et al. (1986) to be a value of 0.12 and specific capacities for gun perforated wells were reported to be about 1 (gal/min)/ft of drawdown. Wells commonly yield 25 to 150 gpm; and some may yield as high as 300 gpm locally (Johnson, 1983). Water wells in the Vamoosa-Ada are from 30 to 750 feet deep (Bingham and Moore, 1975).

Water from the Vamoosa-Ada aquifer is of generally good quality, ranging in total dissolved solids (TDS) concentrations between 200 to 1,000 milligrams per liter (mg/l) (Johnson, 1983). Ground water composition tends to be dominated by sodium, calcium, and bicarbonate (D'Lugosz et al., 1986). However, sodium, sulfate, and chloride may constitute high proportions in places.

Underlying the Vamoosa Formation are the rocks of the Missourian Series which consist of, in descending order, the Ochelata Group and the Skiatook Group. The strata of the Ochelata Group (in descending order) are the Tallant, Barnsdall, Wann, Iola and Chanute Formations. The rocks of the Skiatook Group consist of (in descending order) the Dewey, Nellie Bly, Hogshooter, Coffeyville, Checkerboard and Seminole Formations. These formations outcrop successively from west to east in the eastern two thirds to one half of the county.

The lithology of these strata is similar to that of the Vamoosa, being composed of resistant sandstone beds and clayey, silty, sandy shale. The sandstone beds tend to be coarse grained, conglomeratic and massive in the south. In the north sandstone units contain thin beds of fine to medium grained sandstone which are interbedded with silty and sandy shale; the shale content being greater in this direction. The Missourian Series strata contain several limestone formations and some coal beds. The shale, limestone and coal beds in the Pennsylvanian section affect ground water by acting as confining beds (aquitards).

In contrast to the Vamoosa-Ada aquifer, none of the older rocks are identified as principal bedrock aquifers (Johnson, 1983). However, wells yield 25 to 50 gpm at depths from 20 to 200 feet from these formations. The quality of ground water is more variable, with some generally good quality water produced just east of the Vamoosa-Ada (TDS of 150 to 500 mg/l) and fair to poor water (650 to 50,000 mg/l TDS) produced in the eastern one third of the county (Bingham and Moore, 1975). The composition of the fresh ground water tends to be mainly made up of calcium, magnesium and bicarbonate but indications of contamination are evidenced by water with large TDS concentrations of which sodium, sulfate and chloride constitute major proportions (Morton, 1986).

Ground water is found at shallow depths in Creek County, usually within 25 feet of ground surface. However, deeper wells may be required to obtain producible quantities of ground water. The base of fresh water (i.e., water containing less than 1,000 mg/l TDS) is encountered at depths of 200 to 500 feet below ground level in the eastern part of Creek County, but is found at depths of 500 to 1,000 feet in the west (Bingham and Moore, 1983). Areas with a deep zone of fresh water tend to be correlated with thick sandstone accumulations (D'Lugosz et al., 1986). Below fresh water is a zone of brackish water followed by brines at greater depths. These deep formation brines constitute a large potential source of contamination of fresh ground water as a result of oil-field activities (Morton, 1986).

The regional ground water flow direction is from west to east as is surface drainage. However, locally the shallow ground water flows in various directions to points of discharge into surface water bodies, such as rivers, creeks, lakes, and ponds. Impacted ground water discharging into a creek may serve as source of surface water pollution.

Almost all recharge to ground water comes from downward infiltration of precipitation that falls on the land surface. However, most of the precipitation is lost to evapotranspiration and surface runoff, thus only about 4 to 10 % reaches the zone of saturation (D'Lugosz et al., 1986). Recharge to the Pennsylvanian aquifers occurs where the formations outcrop. This constitutes a large area in Creek County. Most recharge to ground water occurs during the winter months when evapotranspiration is low.

The shallow subsurface soils and rocks of Creek County have not been reported to be prone to solution cavities. Although high sulfate values in ground water from the Pennsylvanian rocks may be attributed to gypsum dissolution, sink holes have not been reported in the area. Furthermore, a review of the United States Geological Survey topographic map for the site does not show geomorphology of karst terrain. However, clays of outcropping Pennsylvanian rocks are prone to formation of desiccation cracks during dry periods. Also, zones of highly fractured rock may exist near surface faults.

Site Hydrogeology and Ground Water Use

The Barnsdall Formation outcrops under the Wilcox Oil Company Refinery site. The Barnsdall Formation is heterogeneous in character containing sandstone beds collectively known as the Okesa Sandstone Member which are interbedded with silty and sandy shales. Alluvial deposits of the Sand and Little Deep Fork Creeks are present to the south of the site. The site has been spotted on the following reference material: A) Geologic Map of Creek County (Oakes, 1959); B) Maps Showing Principal Ground Water Resources and Recharge Areas in Oklahoma (Johnson, 1983); and C) Geologic Map of the Oklahoma City Quadrangle, (Bingham and Moore, 1975). These maps indicate that the Vamoosa Formation outcrops about one mile to the west of the site. However, the site is shown to be within the potential recharge area for the Vamoosa-Ada aquifer (Johnson, 1983).

The Barnsdall Formation is the principal source of ground water to the eight active municipal water supply wells of Bristow, Oklahoma according to published records. These wells are located within 2 miles west of the site. One of the wells is located about one quarter mile southwest of the site in the NE/4 SE/4 NE/4 of section 30-T16N-R9E. This well, City of Bristow #7, has been capped and is not active at this time. However, it is capable of producing if re-entered according to Danny Trout of the Bristow Department of Public Works. Ground water from the Barnsdall Formation is produced from a domestic well located within one quarter mile north of the site in the SW/4 SW/4 SW/4 of section 20-T16N-R9E. The OWRB Multipurpose Water Well report for this well indicates that it was drilled in 6/2/83 to a depth of 230 feet. Another municipal water supply well was drilled in the center of section 29-T16N-R9E to a depth of 200 feet; but this well has been plugged and abandoned. It is located within one half mile southeast of the site and its production history is unknown.

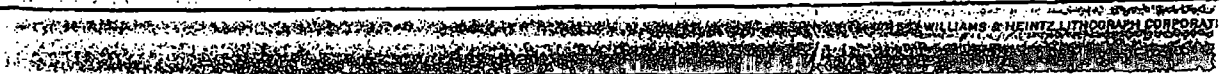
The shallow ground water system near the site is found in upper weathered bedrock zones and alluvial deposits at depths less than 20 feet in nearby domestic wells. The shallow ground water system is under unconfined (water table) conditions and flow at the site is probably toward the south to southeast, discharging into Sand Creek nearby or the Deep Fork located about 3 miles farther south of the site (professional judgement). Ground water in the Barnsdall Formation is probably under confined conditions at depth due to the presence of shale beds within the formation. The deep ground water may be influenced by pumping from Bristow's water wells and the domestic well cited above; thus the flow direction may be to the southwest, west or north depending on the extent of well pumpage at any specific time.

The shallow aquifer at the site is predominantly composed of sandstone and shale which is

weathered near the ground surface, and is probably not in direct hydraulic connection with the deeper parts of the underlying aquifer in the Barnsdall Formation. Based on professional judgement, contaminants in the shallow soil or ground water environments at the site could migrate to the adjacent alluvial aquifers or the shallow portions of the underlying Barnsdall aquifer. Also, improperly constructed water wells and oil wells in the vicinity could serve as direct conduits for migration of potential contaminants to the aquifers. In fact, as indicated on the Herdon map (which is included in the reference material), there are two abandoned oil-exploration wells located within one quarter mile southeast of the site. It is unlikely, however, that contaminants at the site could reach the Vamoosa-Ada aquifer since it outcrops west of the site and overland flow is locally to the south and southeast. Also, a shale section 30 to 60 feet in thickness within the Tallant Formation may act as a protective barrier against contamination of the Vamoosa-Ada aquifer from below.

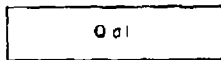
References

- Bingham R. and Moore R., 1975, Hydrologic Atlas 4, "Reconnaissance of the Water Resources of the Oklahoma City Quadrangle Central Oklahoma", Oklahoma Geological Survey.
- D'Lugosz, J.J., McClafflin, R.G., and Marcher, M.V., 1986, "Geohydrology of the Vamoosa-Ada Aquifer East-Central Oklahoma", Oklahoma Geological Survey Circular #87.
- Johnson, K., 1983, "Maps Showing Principal Ground-Water Resources and Recharge Areas in Oklahoma", Oklahoma State Department of Health, Compiled by Kenneth S. Johnson, Oklahoma Geological Survey, 1983.
- Morton, R.B., 1986, "Effects of Brine on the Chemical Quality of Water in Parts of Creek, Lincoln, Okfuskee, Payne, Pottawatomie, and Seminole Counties, Oklahoma", Oklahoma Geological Survey Circular #89.
- Oakes, M.C., 1959, "Geology and Mineral Resources of Creek County, Oklahoma", Oklahoma Geological Survey Bulletin #81.





EXPLANATION



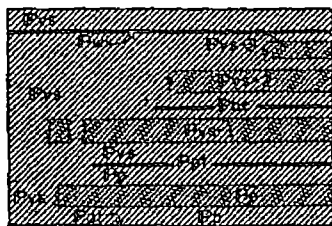
ALLUVIUM

and silt, and clay on flood plains of present streams.)
unconformity



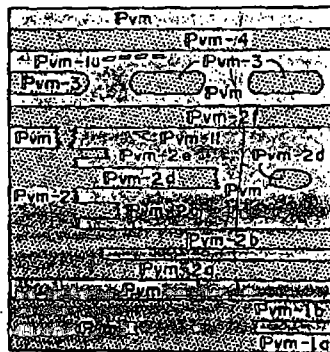
TERRACE DEPOSITS

and silt, and clay deposited by ancient streams. Includes some eolian deposits.)
unconformity



VANOSS FORMATION (LOWER PART) AND PAWHUSKA FORMATION

Vanoss formation: Gray to red shale (Pvs) and sandstones (Pv-1, 2, 3). Intergrades laterally with the Pawhuska formation and interfingers with the Bird Creek limestone (Pbc). Contains Wakarusa limestone (Pwk) in upper part. Pawhuska formation: Turkey Run limestone member (Ppt) at top and Leocompton limestone member (Ppl) at the base, overlaid by one or more sandstones and two or more shales (Pp.).



VAMOOSA FORMATION

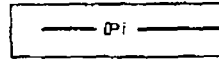
and sandstone units (Pvm-1, 2, 3, 4) interbedded and grading with non-resistant sandstone and sandy, silty (Pvm). In upper part are two sandy limestone beds (Pvm-1u) and (Pvm-1s). Mapped sandstone units consist of related lenses approximately but not strictly in a constant stratigraphic interval.)

unconformity



TALLANT FORMATION

sandstone member (Ptl-1) containing shale lenses and upper shale member (Ptl-2) containing a few thin sandstones.)



IOLA FORMATION

(Sandy limestone, calcareous siltstone, fossiliferous sandstone, and shale. In Creek County the boundaries are indefinite and in part gradational.)



CHANUTE FORMATION

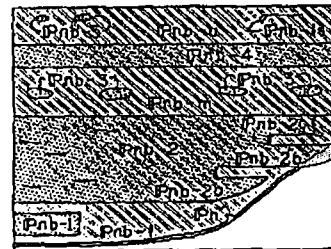
(Sandstone (Pch-1) and shale (Pch-2).)

unconformity



DEWEY FORMATION

(Lower part sandstone, upper part shale. Contains a few local thin sandy limestone beds.)



NELLIE BLY FORMATION AND HOGSHOOTER FORMATION

(Nellie Bly formation: Shale, sandstone, and sparse limestone. The lower shale unit (Pnb-1) bifurcates southward and contains a sandstone lens (Pnb-1s). Sandstone unit Pnb-2 is composed of resistant and non-resistant sandstones and extremely sandy shale; bases of resistant ledges within the unit indicated by black lines. The middle shale unit Pnb-3 contains four mapped sandstone lenses (Pnb-3s), not precisely equivalent. Sandstone unit Pnb-4 contains local sandy limestone beds. The upper shale unit Pnb-4 contains two mapped calcareous sandstone lenses (Pnb-4s), not precisely equivalent, and one mapped sandy limestone bed Pnb-4s. Hogshooter formation: Represented by gray sandy limestone and calcareous sandstone which crop out from place to place in shale above sandstones of the Coffeyville formation and below sandstones of the Nellie Bly formation.)

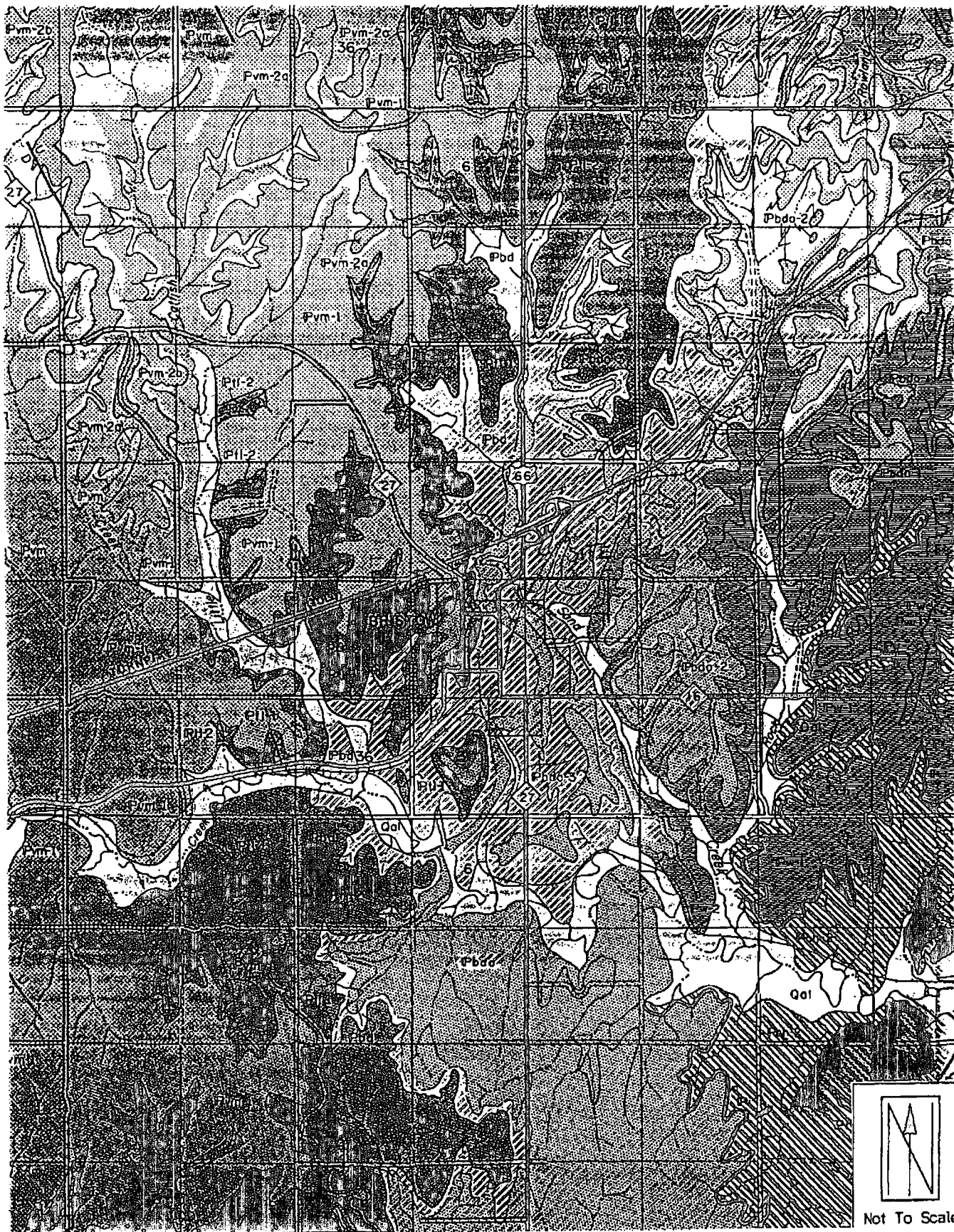


COFFEYVILLE FORMATION

(Units Pcf-1, 2 are composed of silty, sandy shale. Units Pcf 1, 2, 3, 4, 5 are composed of resistant sandstone lenses, non-resistant sandstone, and extremely sandy, silty shale. Bases of resistant ledges within units are indicated by black lines. Neither top nor base of any sandstone unit is the same bed throughout.)



GROUP
OCHELATA
SYSTEM
SERIES
GROUP
MISSOURI
PENNSYLVANIAN
SKIATOOK

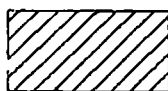


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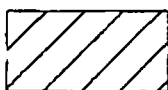
EXPLANATION

RECHARGE AREAS

Patterns of red lines on the map show known or potential recharge areas for the various bedrock aquifers.



Recharge Areas. This pattern shows areas that are known to be part of the recharge area for a bedrock aquifer: includes outcrops of the aquifer and of overlying porous and permeable rocks hydraulically connected with the aquifer.



Potential Recharge Areas. This pattern shows areas that may be part of the recharge area for a bedrock aquifer: includes areas where confining strata may contain pathways for downward movement of water to the aquifer, and safety zones (generally extending 4 miles beyond the known limits of the aquifer) that may overlie unknown extensions of the aquifer or rocks hydraulically connected with the aquifer.

BEDROCK AQUIFERS

Colored areas on the map show distribution of bedrock aquifers, which are the rock units generally considered favorable or moderately favorable for development of ground-water resources. Bedrock aquifers are listed below by geologic age from oldest to youngest. References, listed at the end of each aquifer description, include Hydrologic Atlases (HA) and Other Reports that provide more detailed information. All references are given in the 4-page pamphlet that accompanies this map.

Og

Ogallala Formation (Tertiary in age). Loosely cemented layers of fine- to medium-grained sand, silt, clay, and gravel in western Oklahoma and Panhandle; locally contains thin beds of caliche. Thickness generally ranges from 100 to 700 ft. in Panhandle and 100 to 400 ft. elsewhere. Wells commonly yield 25 to 1,500 gpm of water that is of good quality (generally less than 500 mg/L dissolved solids). Recharge areas include all areas where Ogallala crops out or is covered by younger porous and permeable sediments. References: HA-5, HA-8, HA-250, HA-373, HA-450; also Other Reports 12, 13, 17, 21, 22, 23, 24, 25, 26, 28, 30, 31, 32, 33, 40, 42, 43, 52, 54, 55, 61, 66.

An

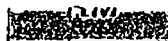
Antlers Sandstone (Cretaceous in age). Loosely cemented fine-grained sand and sandstone with some layers of shale and clay in southeastern Oklahoma. The aquifer includes underlying Holly Creek Formation in T. 6 S., R. 24-27 E., of eastern McCurtain County. Antlers aquifer typically ranges from 200 to 700 ft. thick. Wells commonly yield 10 to 50 gpm, but in some areas they may yield up to 400 gpm. The water is of good quality (generally 200 to 1,000 mg/L dissolved solids). Recharge areas include outcrops of Antlers Sandstone and overlying Goodland Limestone; potential recharge areas include areas where aquifer underlies younger Cretaceous strata in the south. References: HA-3, HA-9; also Other Reports 9, 20, 33, 61.

Elk City Sandstone (Permian in age). Fine-grained sandstone with minor amounts of silt and clay in southwestern Oklahoma. Maximum thickness is about 185 ft. Wells commonly yield 25 to 300 gpm of water that is of good quality (generally less than 500 mg/L dissolved solids). Recharge areas include all outcrops of Elk City Sandstone. References: HA-5; also Other Reports 33, 47, 61.

Rv

Rush Springs Sandstone and Marlow Formation (Permian in age). Fine-grained sandstone with some layers of gypsum, shale, and dolomite in western Oklahoma. The amount of shale increases in Dewey County and farther north. Thickness of aquifer ranges from 400 ft. in the south to 200 ft. in the north. Wells commonly yield 25 to 300 gpm of water that is of good quality (generally 200 to 1,000 mg/L dissolved solids), although in some areas of Dewey County and farther north the water locally is of fair to poor quality (1,500 to 4,000 mg/L dissolved solids). Recharge areas include Rush Springs and Marlow outcrops and extend to limits of outcrop on south and east; recharge areas also include outcrops of gypsum and other rocks of overlying Cloud Chief Formation in parts of Caddo, Custer, and Washita Counties. Potential recharge areas in the west extend 4 miles beyond the western limit of the aquifer. References: HA-3, HA-5, HA-6, HA-8; also Other Reports 6, 7, 15, 19, 33, 41, 46, 50, 53, 61, 64, 69.

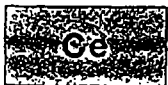
Blaine and Dog Creek Formations (Permian in age). Gypsum and dolomite layers (locally fractured and permeable) interbedded with shale in southwestern Oklahoma. The total thickness of the aquifer (the lower part of the Dog Creek Formation and the entire Blaine Formation) is about 250 ft. Wells commonly yield 300 to 2,500 gpm of water that is of fair to good quality.



in Dewey County and farther north. Thickness of aquifer ranges from 200 ft. in the south to 200 ft. in the north. Wells commonly yield 25 to 300 gpm of water that is of good quality (generally 200 to 1,000 mg/L dissolved solids), although in some areas of Dewey County and farther north the water locally is of fair to poor quality (1,500 to 4,000 mg/L dissolved solids). Recharge areas include Rush Springs and Marlow outcrops and extend to limits of outcrop on south and east; recharge areas also include outcrops of gypsum and other rocks of overlying Cloud Chief Formation in parts of Caddo, Custer, and Washita Counties. Potential recharge areas in the west extend 4 miles beyond the western limit of the aquifer. References: HA-3, HA-5, HA-6, HA-8; also Other Reports 6, 7, 15, 19, 33, 41, 46, 50, 53, 61, 64, 69.



BD Blaine and Dog Creek Formations (Permian in age). Gypsum and dolomite layers (locally fractured or cavernous) interbedded with shale in southwestern Oklahoma. The total thickness of the aquifer (the lower part of the Dog Creek Formation and the entire Blaine Formation) is about 250 ft. Wells commonly yield 300 to 2,500 gpm of water that is of fair to poor quality (generally 1,500 to 6,000 mg/L dissolved solids). Recharge areas are outcrops of Blaine, Dog Creek, Rush Springs, and Marlow Formations that overlie the aquifer. Potential recharge areas include other outcrops of Rush Springs, Marlow, Dog Creek, and Blaine strata that dip toward the aquifer. References: HA-5, HA-6; also Other Reports 33, 56, 61, 62.



Ce Cedar Hills Sandstone (Permian in age). Fine-grained sandstone interbedded with layers of siltstone and shale in northwestern Oklahoma. Thickness typically is about 180 ft. Wells commonly yield 150 to 300 gpm of water that is of good to poor quality (generally 500 to 3,000 mg/L dissolved solids). Recharge areas include Cedar Hills outcrops and extend to limits of outcrop on east; potential recharge areas in south and west extend 4 miles beyond the limits of aquifer. References: HA-7, HA-8; also Other Reports 15, 57, 63.



GW Garber Sandstone and Wellington Formation (Permian in age). Fine-grained sandstone irregularly interbedded with shale and siltstone in central Oklahoma; grades into shale to north and south. Thickness of aquifer ranges from about 300 ft. in the south to about 800 ft. in the north. Wells commonly yield 25 to 400 gpm of water that is of good quality (generally 200 to 1,000 mg/L dissolved solids). Recharge areas consist of outcrops of the aquifer and extend eastward to the approximate top of shales that make up much of the lower one-third of the Wellington Formation. Potential recharge areas include areas in the west where aquifer underlies younger Permian strata; also areas that extend 4 miles south, west, and north of aquifer limits. References: HA-4; also Other Reports 4, 5, 29, 33, 61, 67, 68.



OS-a Oscar Group (Early Permian or Late Pennsylvanian in age). Area designated a consists of fine-grained sandstone interbedded with shale and siltstone in central Oklahoma; contains some conglomerate in the south. Main part of aquifer is in lower half of Oscar Group; upper half of Oscar is predominantly shale. Thickness of aquifer ranges from about 150 ft. in south to 300 ft. in north. Wells commonly yield 25 to 50 gpm of water that is of good quality (generally 300 to 1,000 mg/L dissolved solids). Recharge areas include outcrops of Oscar Group; also included are outcrops of shales and sandstones in lower part of overlying Wellington Formation that appear to be hydraulically connected with either the Oscar or the Garber-Wellington aquifer. Potential recharge areas extend 4 miles north, east, and south of aquifer limits. References: HA-4.



OS-b Oscar Group (Early Permian or Late Pennsylvanian in age). Areas designated b consist of interbedded sandstones and shales in south-central Oklahoma. Total thickness is 300 to 500 ft. Wells commonly yield 50 to 180 gpm of water that is of good to fair quality (generally 500 to 1,500 mg/L dissolved solids). The Oscar Group does not crop out where it is an aquifer, and thus its recharge area is uncertain. Potential recharge areas include, and extend 4 miles beyond, the known limits of the aquifer. References: HA-3, HA-6; also Other Reports 33, 61.



V/A Vamoosa Formation and Ada Group (Pennsylvanian in age). Fine- to coarse-grained sandstone interbedded with shale and siltstone in central and northern Oklahoma; contains some conglomerate in the south. Mapped aquifer locally includes sandstones and shales of overlying Vanoss Group that are hydraulically connected with Vamoosa-Ada aquifer. Boundaries of aquifer shown here represent maximum extent reported on HA-4 and HA-7, or by D'Lugosz, McClafflin, and Marcher (1981). Thickness of aquifer ranges from about 200 ft. in the south to about 500 to 800 ft. elsewhere. Wells commonly yield 25 to 150 gpm, and locally yield as much as 300 gpm, of water that is of good quality (generally 200 to 1,000 mg/L dissolved solids). Recharge areas include outcrops of aquifer and, locally, some hydraulically connected rocks. Potential recharge areas extend 4 miles beyond the aquifer limits. References: HA-3, HA-4, HA-7; also Other Reports 3, 10, 11, 14, 15, 33, 38, 61.

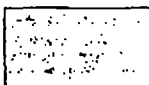


NEO Noxie Sandstone (Pennsylvanian in age). Coarse-grained sandstone with some shale layers in northeastern Oklahoma. Thickness ranges from about 50 to 100 ft. Wells commonly yield 10 to 50 gpm of water that is of good quality (generally less than 1,000 mg/L dissolved solids). Recharge areas include outcrops of aquifer and overlying sandstones and shales of Chanute Formation. Potential recharge areas include areas in west where aquifer underlies younger Pennsylvanian rocks; also areas that extend 4 miles south of aquifer limits. References: HA-2; also Other Reports 14, 33, 38.



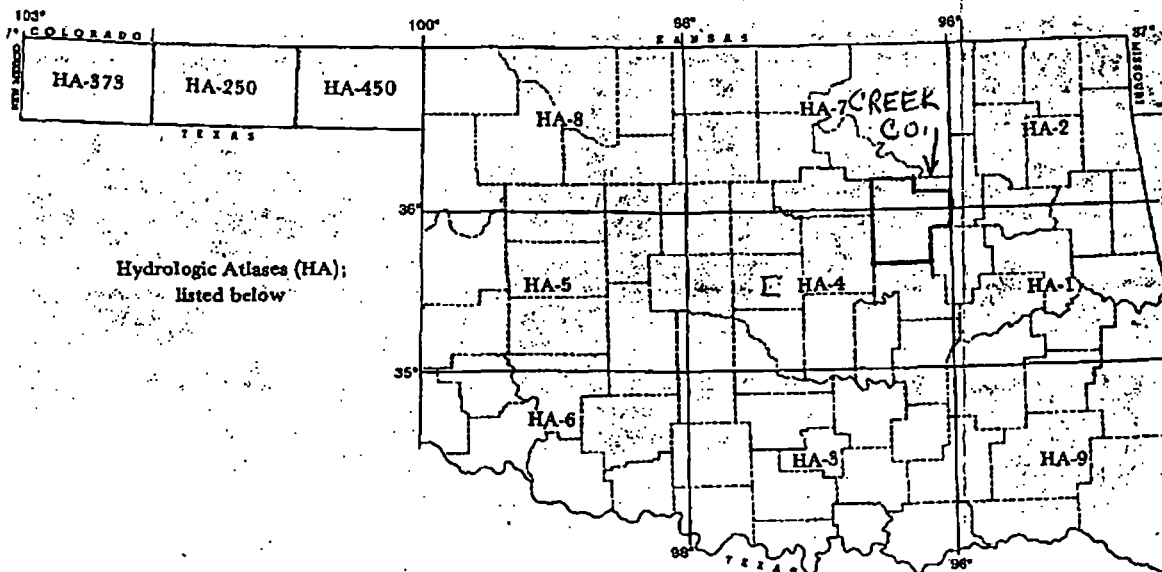
KR Keokuk and Reeds Spring Formations (Mississippian in age). This northeastern Oklahoma unit, also referred to as the "Boone Formation" or "Boone Chert," consists of limestone and cherty limestone beds that locally are fractured or cavernous. Thickness ranges from 250 ft. in south to about 400 ft. in north. Wells consistently yield more than 3 gpm, and some yield as much as 50

EXPLANATION



Alluvium and Terrace Deposits (Quaternary in age). Unconsolidated deposits of sand, silt, clay, and gravel that occur along or adjacent to modern and ancient rivers and streams. Thickness generally ranges from 10 to 50 ft. (locally as much as 100 ft.). Wells generally yield 10 to 500 gpm of water (locally several thousand gpm), and most water is of good quality (less than 1,000 mg/L). Recharge areas are essentially the same as distribution of the alluvium and terrace deposits.

REFERENCES



Hydrologic Atlases (HA);
listed below

Hydrologic Atlases

HA-1. Marcher, M.V., 1969, Reconnaissance of the water resources of the Fort Smith Quadrangle, east-central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 1, 4 sheets, scale 1:250,000.

HA-2. Marcher, M.V., and Bingham, R.H., 1971, Reconnaissance of the water resources of the Tulsa Quadrangle, northeastern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 2, 4 sheets, scale 1:250,000.

HA-3. Hart, D.L., Jr., 1974, Reconnaissance of the water resources of the Ardmore and Sherman Quadrangles, southern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 3, 4 sheets, scale 1:250,000.

HA-4. Bingham, R.H., and Moore, R.L., 1973, Reconnaissance of the water resources of the Oklahoma City Quadrangle,

HA-7. Bingham, R.H., and Bergman, D.L., 1980, Reconnaissance of the water resources of the Enid Quadrangle, north-central Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 7, 4 sheets, scale 1:250,000.

HA-8. Morton, R.B., 1980, Reconnaissance of the water resources of the Woodward Quadrangle, northwestern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 8, 4 sheets, scale 1:250,000.

HA-9. Marcher, M.V., and Bergman, D.L., in preparation, Reconnaissance of the water resources of the McAlester and Texarkana Quadrangles, southeastern Oklahoma: Oklahoma Geological Survey Hydrologic Atlas 9, 4 sheets, scale 1:250,000.

HA-250. Wood, P.R., and Hart, D.L., 1957, Availability of ground water in Texas County, Oklahoma: U.S. Geological

EXPLANATION

The stratigraphic nomenclature and age determinations used herein are those accepted by the Oklahoma Geological Survey and do not necessarily agree with those of the U.S. Geological Survey.

Gal

ALLUVIUM

ay, and lenticular beds of gravel. Thickness about 30 to 100 feet and probably averages along major streams. Along minor streams, ges from a few feet to about 60 feet and probs about 25 feet. Alluvium is a major aquifer adrange.



TERRACE DEPOSITS

ds of sand, silt, clay, and gravel. Thickness few feet to about 100 feet and probably aver-foot along major streams. These deposits are along Cimarron, Canadian, and North Cana-

UNCONFORMITY



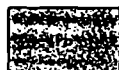
MARLOW FORMATION

ge-brown fine-grained gypsiferous sandstone, ed-brown shale. Contains 10 feet of calcitic nes near middle and 2 thin dolomites (or top). Exposed thickness, about 50 feet (top 50 ded).



DOG CREEK SHALE

rown silty shale and some fine-grained sand-ne one or two layers of thin dolomite (or gyp-part; basal part grades southward into Chick-ion. Thickness averages about 200 feet near 10 feet near Chickasha.



BLAINE FORMATION

gypsime with thin dolomites below each gyp-ided with red-brown shale; grades southward ia Formation. Thickness, 50 to 75 feet.



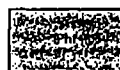
FLOWERPOT SHALE

rown silty clay shale with stringers of gypsum id selenite); grades southward into Chickasha hickness, 20 to 40 feet.



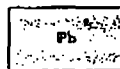
CHICKASHA FORMATION

mudstone conglomerate and red-brown to silty shale and siltstone, with minor amounts



HILLTOP FORMATION

Mainly shale, grading upward into massive siltstone and fine-grained sandstone; grades northward into Barnsdall Formation. Chanute Formation, and Dewey Limestone. Thickness ranges from 0 to 200 feet.



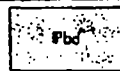
BELLE CITY LIMESTONE

Consists of two fossiliferous limestone units with an intervening fossiliferous shale. Thickness ranges from 12 to 20 feet; present in southern part of area only, where it is below Hilltop Formation.



TALLANT FORMATION

Mostly fine- to medium-grained sandstone 10 to 60 feet thick overlain by shale 25 to 65 feet thick. Cut out by Vamoosa Formation in central part of area. Total thickness ranges from 0 to 100 feet.



BARNSDALL FORMATION

Mostly fine-grained sandstone overlain by shale; may grade northward into Wann Formation. Thickness ranges from about 80 to about 200 feet.



WANN FORMATION and IOLA LIMESTONE

Wann Formation, shale and fine- to medium-grained sand-stone; thickness, 40 to 180 feet. Underlying Iola Limestone, mainly fine-grained calcareous sandstone and limestone with some shale; thickness, 15 to 20 feet.



CHANUTE FORMATION

Mainly fine- to medium-grained sandstone 3 to 20 feet thick, overlain by shale 20 to 80 feet thick. Total thickness ranges from about 25 to 90 feet.



DEWEY LIMESTONE

Mainly sandy limestone or calcareous sandstone containing limestone lenses 1.5 to 20 feet thick, overlain by shale 5 to 50 feet thick. Total thickness ranges from 20 to 60 feet.



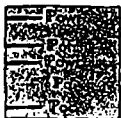
NELLIE BLY FORMATION and HOGSHOOTER LIMESTONE

Missourian

VIAN

WELLINGTON FORMATION

Red-brown shale and orange-brown fine-grained sandstone, containing much maroon mudstone conglomerate and chert conglomerate to south. Thickness ranges from about 150 feet in south to 500 feet in north.



OSCAR GROUP

Red-brown to gray shale and orange-brown fine-grained, crossbedded sandstone; grades southward into arkosic sandstone and conglomerate. Includes *Herington Limestone* at top in Payne County, *Neva Limestone* (0.2 to 1.2 feet thick) at base in Lincoln County, and *Hart Limestone* (4 to 10 feet thick) at base in Pottawatomie County. In Payne County, includes thin stringers of *Winfield Limestone*, *Pow* (75 feet below top), *Fort Riley Limestone*, *Poi* (245 feet below top), *Wreford Limestone*, *Pow* (345 feet below top), and *Cottonwood Limestone*, *Poc* (525 feet below top). Thickness ranges from 300 feet in south to 600 feet in north.



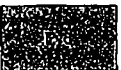
VANOSS GROUP

Red-brown to gray shale and orange-brown fine-grained, crossbedded sandstone; grades southward into arkosic sandstone and conglomerate. Includes many thin limestone beds and shale units north of North Canadian River (descending): *Roca Shale* (75 feet thick), *Red Eagle Limestone*, *Pva* (3 to 8 feet thick), *Johnson Shale* (60 feet thick), *Long Creek Limestone*, *Pvk* (9 to 12 feet thick), *Hughes Creek Shale* (52 feet thick), *Americus Limestone*, *Pva* (1.0 to 2.5 feet thick), *Admire Shale* (70 feet thick), *Brownville Limestone*, *Pvb* (1 to 3 feet thick), *Pony Creek Shale* (75 feet thick), *Grayhorse Limestone*, *Pvg* (1 foot thick), unnamed shale (70 feet thick), *Elmont Limestone*, *Pva* (1.2 to 7.8 feet thick), *Stonebreaker Shale* (60 feet thick), and *Reading Limestone* (1.5 feet thick), at base. Total thickness of group ranges from 250 feet in south to 490 feet in north.



ADA GROUP

Mostly orange-brown fine-grained sandstone and red-brown to gray shale; grades southward into chert conglomerates. Includes the following thin limestone beds and shale units north of North Canadian River (descending): *Auburn Shale* (80 feet thick), *Wakarusa Limestone*, *Paw* (1 to 6 feet thick), unnamed shale (95 feet thick), *Bird Creek Limestone*, *Pab* (1 to 9 feet thick), *Severy-Aarde Shale* (45 feet thick), *Turkey Run Limestone*, *Pai* (1 foot thick), unnamed shale (45 feet thick), and *Lecompton Limestone* (1.5 to 10 feet thick), at base. Total thickness of group ranges from 100 feet in south to 280 feet in north.

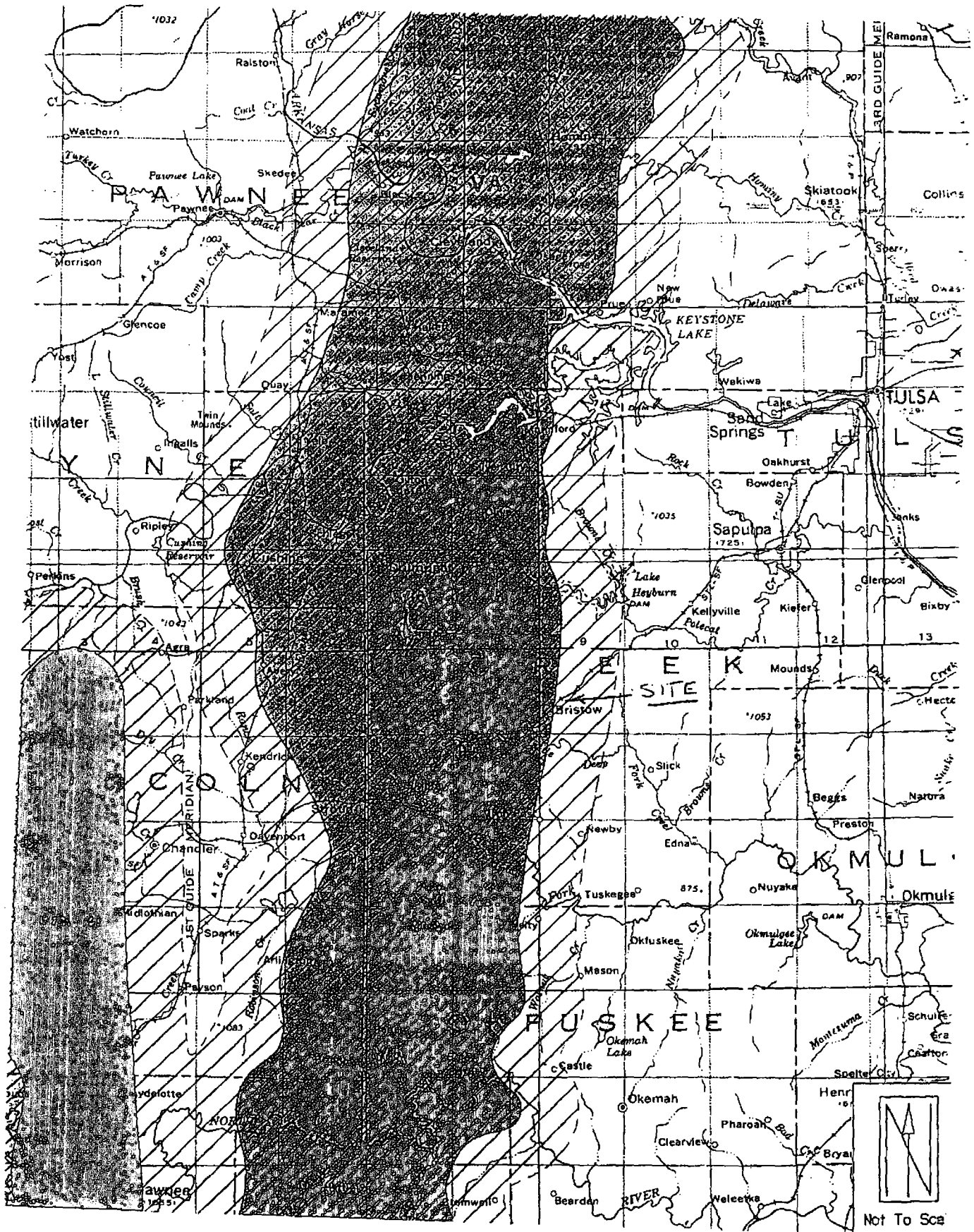


VAMOORA FORMATION

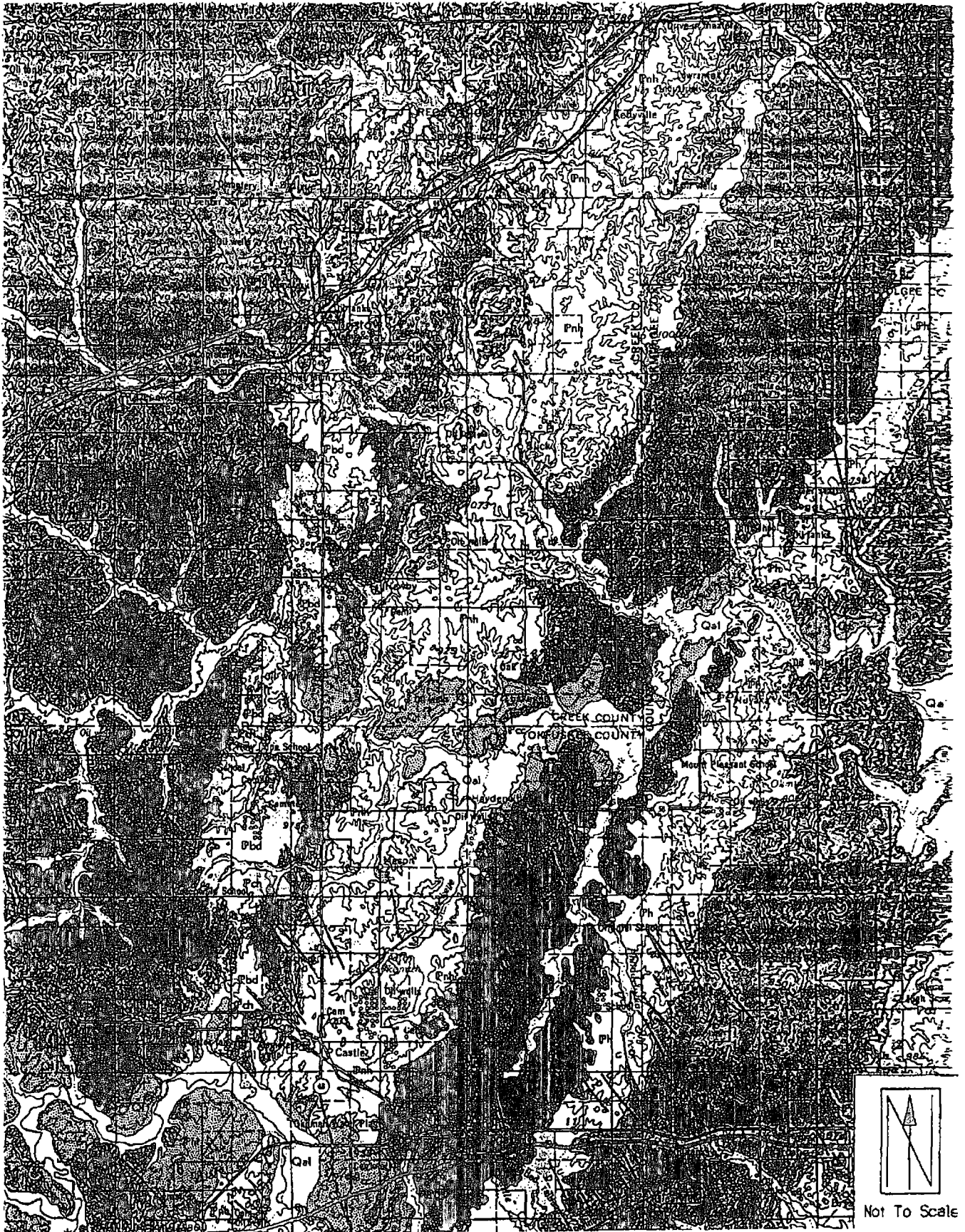
Alternating thin to massive layers of fine- to coarse-grained sandstone and sandy, silty shale containing some chert conglomerate in middle and lower parts of formation. Thickness ranges from about 200 to about 680 feet.

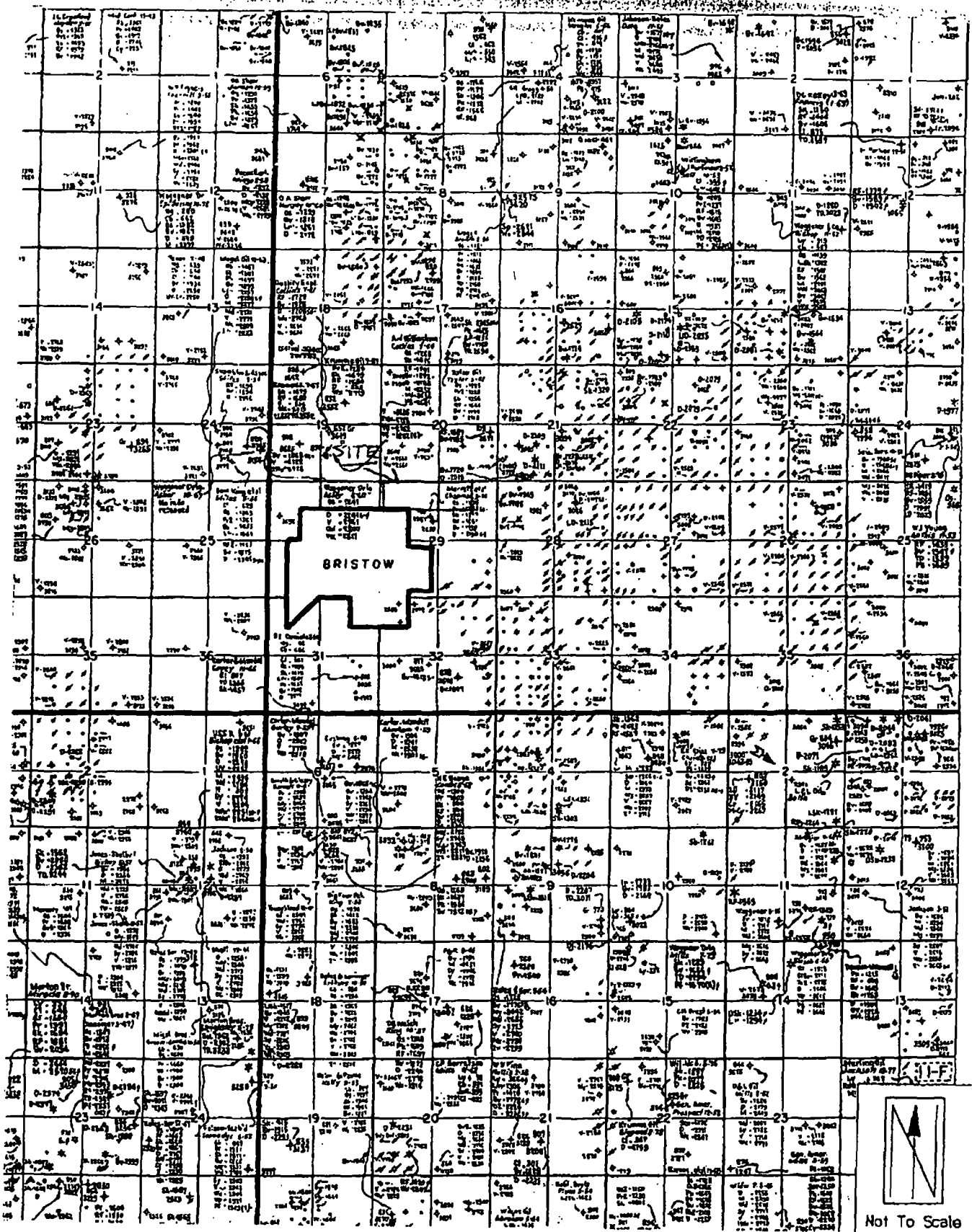
UNCONFORMITY

Fault, approximately 10 upthrown side; D, down



KMI0000047





KMI0000049

MARK S. COLEMAN
Executive Director



DAVID WALTERS
Governor

State of Oklahoma
DEPARTMENT OF ENVIRONMENTAL QUALITY

August 5, 1993

Mr. Scott Christenson
United States Geological Survey
202 Northwest 66th Street
Building 7
Oklahoma City, Oklahoma 73101

Dear Mr. Christenson:

The purpose of this letter is to request any information regarding the location and use of wells located in the areas listed on the attached page. The information provided by your office will be used to partly describe ground water targets preliminary site assessments conducted by the DEQ (Superfund), as authorized through a cooperative agreement with the U.S. Environmental Protection Agency. For your convenience, I have enclosed a sample of the type of information needed by your office.

Your assistance is greatly appreciated by me and our division. If you have any questions, please call me at 271-7049.

Sincerely,

A handwritten signature in cursive script that reads "Scott Stegmann".

Scott Stegmann
Site Assessment Unit
Waste Management Division

Attachments

SITE NAME	Sections	Township	Range	County
AT & SF Roundhouse	1, 10-15, 21-28, 33-36	10 N	3 E	Pottawatomie
	5-10, 14-23, 26-35	10 N	4 E	
	1-4, 10-14	9 N	3 E	
	2-10, 16-18	9 N	4 E	
Ben Franklin Refining Company	9-17, 20-36	4 S	4 W	Jefferson
	7, 8, 16-21, 28-33	4 S	3 W	
	1-6, 8-16, 22-24	5 S	4 W	
	4-9, 17, 18	5 S	3 W	
Chicago, Rock Island, & Pacific Roundhouse	35, 36	11 N	3 E	Pottawatomie
	31-33	11 N	4 E	
	1-3, 9-16, 21-28, 33-36	10 N	3 E	
	3-10, 14-23, 26-34	10 N	4 E	
	1-3, 11, 12	9 N	3 E	
	3-8.	9 N	4 E	
Mercury Oil Refining Company	7, 17-21, 28-33	11 N	2 W	Oklahoma
	9-17, 19-36	11 N	3 W	
	4-8, 17, 18	10 N	2 W	
	1-17, 21-24	10 N	3 W	
Rock Island Roundhouse - Haileyville	10-16, 20-29, 32-36	5 N	16 E	Pittsburg
	7, 17-21, 28-33	5 N	17 E	
	1-5, 8-17, 21-24	4 N	16 E	
	4-9, 16-20	4 N	17 E	
10th Street Sludge	10-16, 21-28, 33-36	12 N	3 W	Oklahoma
	7-9, 15-22, 26-35	12 N	2 W	
	1-4, 9-15, 24	11 N	3 W	
	2-10, 16-19	11 N	2 W	
Tide Water Associated Oil Company	25, 26, 35, 36	18 N	6 E	Creek
	19-22, 26-36	18 N	7 E	
	1-3, 10-15, 23-26, 36	17 N	6 E	
	1-24, 26-34	17 N	7 E	
United States Smelting	13, 23-26, 35, 36	12 N	16 E	McIntosh
	4, 7-36	12 N	17 E	
	18, 19, 30, 31	12 N	18 E	
	1, 2, 12	11 N	16 E	
	1-18.	11 N	17 E	
	6	11 N	18 E	
Victory Metals	13, 22-27, 33-36	12 N	12 E	Oklmulgee
	17-22, 26-35	12 N	13 E	
	1-4, 9-16, 22-26	11 N	12 E	
	2-11, 14-22, 28-30	11 N	13 E	
Wilcox Oil Company	1-2, 10-15, 22-27, 34-36	16 N	8 E	Creek
	3-11, 13-36	16 N	9 E	
	1-3, 11, 12	15 N	8 E	
	2-10, 17, 18	15 N	9 E	

DATE: 08/10/94

Preliminary data, subject to revision. U.S. Geological Survey.

PAGE 2

LOCAL WELL NUMBER	OWNER	DEPTH DRILLED (FEET)	DEPTH OF WELL (FEET)	ALTITUDE OF LAND SURFACE (FEET)	WATER LEVEL (FEET)	WATER- LEVEL DATE	AQUIFER CODE	PRIMARY USE OF WATER
10N-03W-14 CDC 1	Moore, City of, Well 3	—	690	1230	—	—	318GRBR	P
10N-03W-14 DB 1	Moore, City of, Test Hole Loc B.	864	864	1240	—	—	317GBWG	U
10N-03W-14 DBB 1	Moore, City of, (Abandoned)	—	501	1250	160	11-10-42	318GRBR	P
10N-03W-15 ABB 1	Moore, City of, Well 9	—	800	1250	250	00-00-63	318GRBR	P
10N-03W-15 ACC 1	Moore, City of, Well 2	609	609	1240	215.12	07-23-45	318GRBR	P
10N-03W-15 CBA 1	Moore, City of, Well 6	—	735	1240	220	06-08-62	318GRBR	P
10N-03W-15 CDC 1	Moore, City of, Well 1	—	750	—	—	—	317GBWG	P
10N-03W-16 AAA 1	Moore, City of, Well 31	—	—	—	—	—	317GBWG	P
10N-03W-16 ACA 1	Moore, City of, Well 20	—	750	—	—	—	317GBWG	P
10N-03W-17 BAA 1	Mustang, City of, Well 2	820	820	1222	447	09-08-86	317GBWG	P
10N-03W-17 CBC 1	Mustang, City of, Well 1	845	795	1190	423	11-22-83	317GBWG	P
10N-03W-17 DB 1	Mustang, City of Test Hole 1	891	891	1210	—	—	—	U
10N-03W-17 DDC 1	Mustang, City of, Test Hole M-II	1000	1000	1200	—	—	—	U
10N-03W-21 AAA 1	—	—	318.00	1228	284.26	03-04-87	318GRBR	U
10N-03W-21 AAA 2	—	—	93.00	—	—	—	112TRRCH	U
10N-03W-21 AC 1	Miller 1	8914.	8914	1217	—	—	318HNSS	Z
10N-03W-22 CBA 1	Moore, City of, Well 12	—	880	1214	—	03-31-84	318GRBR	P
10N-03W-22 CCC 1	Moore, City of, Well 21	805	795	1210	370	09-05-86	317GBWG	P
10N-03W-22 DAD 1	Moore, City of, Well 10	—	795	1210	400.00	08-04-87	318GRBR	P
10N-03W-23 ACA 1	Moore, City of, Well 19	—	—	1210	—	—	317GBWG	P
10N-03W-23 DCC 1	Moore, City of, Well 28	820	820	1225	449	09-05-86	317GBWG	P
10N-03W-23 DDD 1	Moore, City of, Well 23	—	—	1225	—	—	317GBWG	P
10N-03W-24 AAA 1	Moore, City of, Well 24	—	767	1185	—	—	317GBWG	P
10N-03W-24 ABB 1	Moore, City of, Well 15	—	734	1220	—	—	317GBWG	P
10N-03W-24 CAA 1	Moore, City of, Well 30	—	—	—	—	—	317GBWG	P
15N-08E-11 AAA 1	—	—	119	—	—	—	323TLNT	U
15N-09E-07 DDA 1	—	—	69.0	—	43.00	04-01-70	323BRDL	U
16N-08E-13 DCD 1	—	—	158	—	—	—	—	U
16N-08E-22 CCD 1	—	—	92.0	850	65	10-15-70	322VMOS	U
16N-08E-27 DDA 1	—	—	140	—	—	—	—	U
16N-09E-06 DA 1	Krumme Oil Co.	—	400	—	50	08-01-69	323WANN	N
16N-09E-06 DDD 1	—	—	120	—	—	—	323TLNT	U
16N-09E-08 CB 1	Krumme Oil Co.	—	325	—	60	11-01-65	323WANN	U
16N-09E-25 ABB 1	—	—	52.0	830	37.00	10-01-70	323DEWY	U
16N-09E-29 C 1	Bristow, City of	—	200	—	120	07-20-71	323BRDL	P
17N-07E-02 BAB 1	—	—	121	—	—	—	—	U
17N-07E-05 A 1	Krumme Oil Co.	—	1145	—	—	—	323BRDL	U
17N-07E-05 AD 1	Gulf Oil Co.	—	1138	—	649	06-01-62	323BRDL	U
17N-07E-08 ACB 1	Drumright, City of	—	280	930	85	07-23-71	322VMOS	P
17N-07E-08 CBC 1	Drumright, City of	—	403	900	75	07-23-71	322VMOS	P

KMI0000052

VIII. References


December 15, 1994

27

Wilcox Oil Company

KMI0000053

Reference 1

 POTENTIAL HAZARDOUS WASTE SITE IDENTIFICATION		REGION VI	SITE NUMBER
<p>NOTE: The initial identification of a potential site or incident should not be interpreted as a finding of illegal activity or confirmation that an actual health or environmental threat exists. All identified sites will be assessed under the EPA's Hazardous Waste Site Enforcement and Response System to determine if a hazardous waste problem actually exists.</p>			
A. SITE NAME Wilcox Oil Co.		B. STREET (or other identifier) North of Bristow	
C. CITY Bristow	D. STATE OK	E. ZIP CODE	F. COUNTY NAME Creek
G. OWNER/OPERATOR (if known) 1. NAME unknown		2. TELEPHONE NUMBER	
H. TYPE OF OWNERSHIP (if known) <input type="checkbox"/> 1. FEDERAL <input type="checkbox"/> 2. STATE <input type="checkbox"/> 3. COUNTY <input type="checkbox"/> 4. MUNICIPAL <input type="checkbox"/> 5. PRIVATE <input checked="" type="checkbox"/> 6. UNKNOWN			
I. SITE DESCRIPTION The site is located in a mostly rural area and is bordered by a residential area to the east and the south, an active railroad track to the west, and a county road to the north. The site appears as a fenced, inactive oil-related facility containing tanks and oil-related equipment in various states of disrepair. There are some barren spots on the site, and several waste piles were visible.			
J. HOW IDENTIFIED (i.e., citizen's complaint, OSHA citations, etc.) State Program		K. DATE IDENTIFIED (mo., day, & yr.) 6-7-94	
L. SUMMARY OF POTENTIAL OR KNOWN PROBLEM Wilcox Oil Co. operated an oil-related facility at this site, and refinery related wastes may be on site. Currently, the contents of the on-site containers are unknown. Integrity of these containers is uncertain. As a result, a potential for release of hazardous substances may exist on the site.			
M. PREPARER INFORMATION NAME Karen Khalafian, Environmental Specialist		2. TELEPHONE NUMBER (405) 271-7137	3. DATE (mo., day, & yr.) 6/7/94

Reference 2

MEMORANDUM

December 18, 1994.

To: Wilcox Oil Company Preliminary Assessment (PA) file.

From: David Cates, Environmental Specialist, DEQ, Superfund (Site Assessment Unit).

Re: Site Reconnaissance.

The PA site reconnaissance of the abandoned refinery operated by Wilcox Oil Company was conducted on Friday December 16, 1994, between 11:00 and 2:30. The Oklahoma Department of Environmental Quality (DEQ) personnel were David Cates and Karen Khalafian. At the beginning of the site reconnaissance the weather was cloudy/overcast with temperatures around 50° F and the wind was blowing from the north and northwest at about 5 to 10 mph. In the afternoon it cleared off and warmed up to around 60° F. The ground was still wet from a rain shower which occurred the previous night. Run off water in the creeks was high and flowing rapidly.

The site reconnaissance was conducted in three phases. The first phase involved visiting the original refinery site located inside the fenced property just east of the railroad right of way. Arthur White, a co-owner of this property, was present and opened the locked gate. The next phase involved visiting the church located just west of the railroad. The Pastor, Dale Floyd, and his wife, Virginia, were present and conveyed that the church did not have a day care center. The third phase involved visiting the abandoned storage tank farm located in the NE/4 NW/4 and NW/4 NE/4 of Section 29, east of the White's property. The current owner of this property, Phil Elias, was present.

The White's property is completely fenced on all sides with an entrance and locked gate on the north side. An east-west section line road marks the north boundary of the property. The west side borders the St. Louis and San Francisco Railroad right of way. On the east side is a private drive extending south from the section line road. About 400 feet south of the section line road the fence angles southwest from the private drive then turns south after crossing the small creek and extends to Sand Creek. The southern border of the property is marked by the fence's position along the north bank of Sand Creek. The total area is about 18 acres which is larger than what is described on their deed (13 acres, more or less) due to the fact that the fence extends all the way to Sand Creek.

Upon entering the White's property four storage tanks and an abundant number of pipe pieces and scrap iron were observed. There are several brick structures remaining on the west side near the railroad right of way. One of the old facility structures located on the north side, next to the section line road, is being used as a residence by Arthur White's younger brother and wife. Concrete tank, tower, and facility foundations were observed at numerous places. A small south trending creek, which had flowing water at the time of the site reconnaissance, is located along the east side of the property. Surface drainage is to the east and south. Trees and dense vegetation are present along banks of the creeks and on

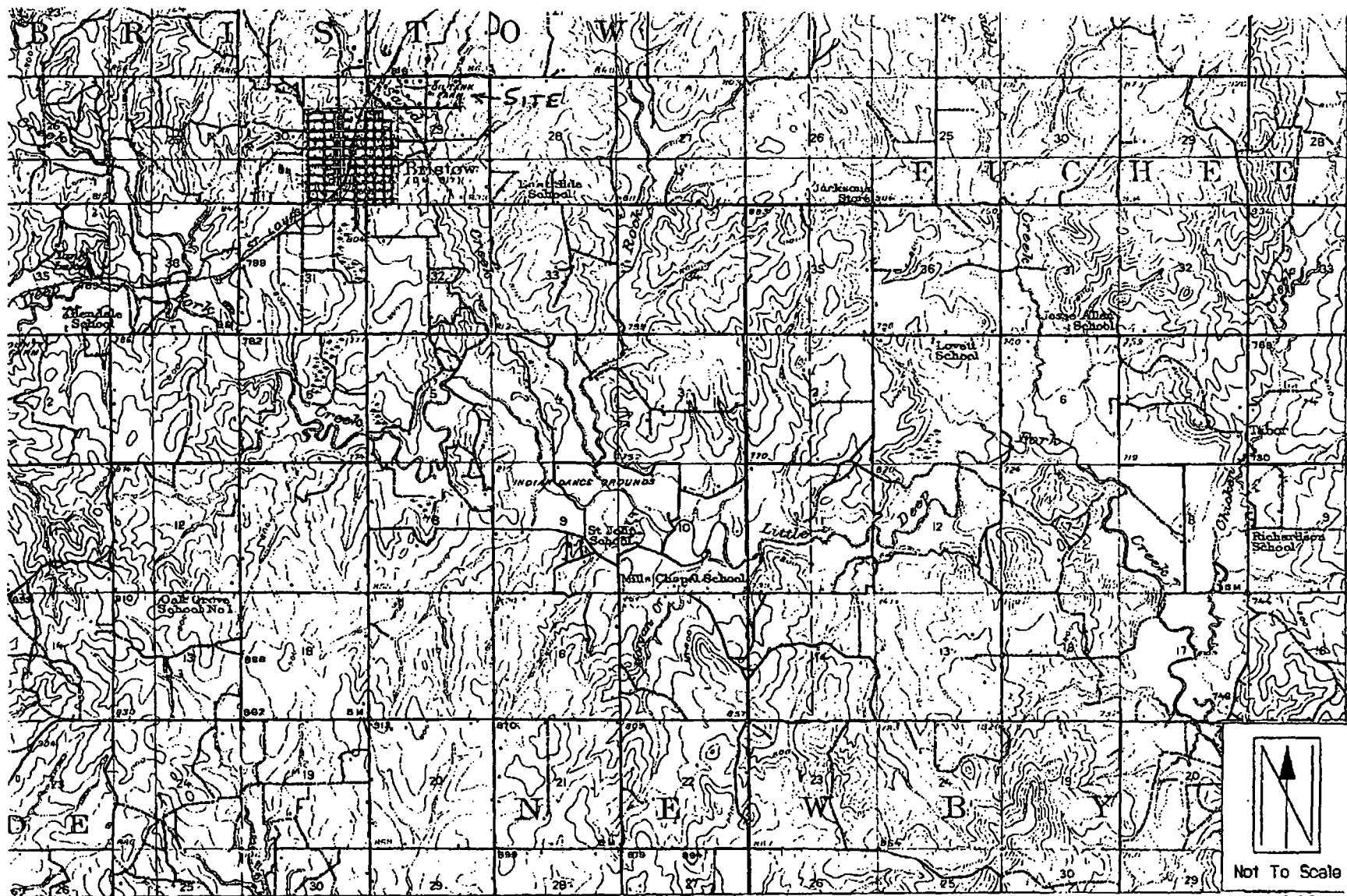
the west side of the property. The remnants of several tanks which had been salvaged for scrap iron were observed. Sludge was present in the bottom of one of these salvaged tanks which was located just south of the residence. It is believed that tank bottom sludge is present in the remaining tanks, as well as, in several bermed areas. Coke, asphalt-like waste and what appears to be elemental sulfur covers the ground in many areas, especially in two areas about 200 feet by 200 feet each located in the central and northeast parts of the property (which is about two acres total). A barren area about 200 feet by 400 feet (about 2 acres) in size is located in the south central portion of the property. This area, which is believed to be soil contaminated by acid or caustic waste, lacks vegetation. A slight acrid odor (possibly SO₂) was detected down wind of the area and some small white colored rocks believed to be precipitated carbonates were present on the ground around the perimeter.

The property of the Bristow First Assembly of God church lies just west of the railroad right of way which forms the eastern property boundary. The southern boundary is Sand Creek. The western and northern boundaries are believed to be the section lines. There are no fences. A gravel drive enters the property from the northeast corner to a gravel parking lot north of the church building itself. The building west of the church is the home of Dale and Virginia Floyd. South of the church is a mobile home which will be used as a residence for the new pastor. Two storage sheds are also near the mobile home. The ground is covered with mown grass except for the parking lot and for trees located along the bank of Sand Creek. Several areas of barren to sparse vegetation totaling about 5,000 square feet (100' by 50'), or about 0.1 acres, were observed just southwest of the church. Dale Floyd indicated that grass would not grow on these areas. He pointed out the contaminated water well which is housed in the small shed just southwest of the church building. He also indicated a place just west of the church where he had seen a seep on top of a sandstone outcrop in the bottom of Sand Creek. The seep was not observed due to high water, but rust colored staining was noted. Sand Creek flows to the south at this location. The church property drains to the west and south. He pointed out an open 6 inch iron pipe descending vertically from ground level. It is located in the middle of the grassy area south of the church. This could be casing of a well or riser pipe for an underground storage tank (UST) or possibly part of a piping network. No odors were detected when a iron plate covering the top of the pipe was lifted off.

The Elias property was visited around 1:00 pm. Entrance was gained along the west side where a lease road extends southeast from the private drive bounding the east side of the White's property. An area of about 2.5 acres in the northwest corner of the property is fenced off. Mr. Elias indicated that he thought this was a gas pipeline compressor station. A pipeline easement extends to the southeast from here. It is marked with flagging and identifiable as a cleared path about twenty five wide. The north boundary is fenced and the east-west section line road extends about 3/4 of the length of the property to the east. A gate without a lock is located near the north quarter corner where another lease road enters the property following a southerly route along a topographic high. A south trending creek is located along the eastern portion of the property, and water was flowing at the time of the site visit. The eastern part of the property drains to the south and southeast while surface drainage in the west is to the southwest and south. The eastern 1/4 of the property

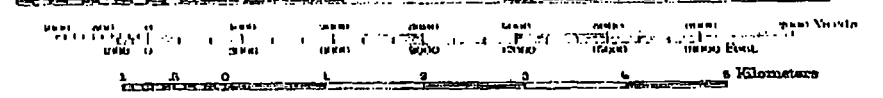
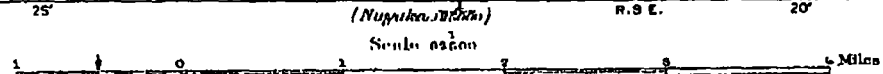
is heavily wooded. While trees are present along the southern fenced property boundary and randomly scattered elsewhere, most of the remaining areas of the property are covered with grasses and brush. The land to the south is cleared of trees and probably farmed or used for grazing cattle. No structures or tanks were observed on the property. Asphalt-like waste believed to be tank bottom sediment from the 50,000 barrel storage tanks once present was observed in four of the bermed areas (T1, T5, T6 & T7) shown on the site sketch map (PA - Figure 2). It is believed that the remaining bermed areas contain this asphaltic material as well (T2, T3, T4). Two areas on the east side of the north-south creek appear as tank batteries on the 1948 15 minute topographic map (Attachment A). These areas (T8 & T9 of the site sketch) are inside the wooded area and are probably eroded flat. The T8 area was investigated but was not found during the site reconnaissance. The total area of waste is calculated to be 282,743 square feet or 6.49 acres ($3.14 \times 100^2 \times 9$). Aerial photos taken in 1941 (Attachment B) show that five 50,000 barrel tanks were present in T2, T3, T4, T5, & T6 locations and two 5,000 barrel tanks were present at the T1 location. The pit in the west central part of the property (P2) contains sludge as does the pit (P4) in the central part of the property. Both pits were devoid of plant life. A section of the berm on the southwest side of the west central pit had been cut by a bulldozer allowing the sludge to drain out over the ground surface towards the southwest to Sand Creek. The pit is about 45,000 square feet in area. An acrid (possibly SO₂) petroleum odor was detected on the down wind (south) side of the pit. The central pit which had been leveled by a bulldozer covers about 28,000 square feet. Mr. Elias indicated that he was responsible for these modifications to the land for the purposes of cleaning up the place for sale. The southwest pit (P1) which covers an area of about 96,000 square feet contains a pond with cattails. Mr. Elias indicated that sludge was present in this pit as well, but it was not observed. All three pits were identified on the 1941, 1950, 1969, and 1991 aerial photos (Attachments B; C; D; E); thus, the surface impoundments have held waste for more than 30 years. The north central pit (P3) was not observed but is suspected of containing waste. It is about 31,415 square feet in area which was determined from aerial photos. No animal life was observed except a field mouse. Mr. Elias said that many hunters use the land for hunting and shooting since it has no controlled access.

There are no schools or daycare centers located within 200 feet of the site. The number of residences within 1/4 mile and between 1/4 and 1/2 mile were determined by a windshield survey. Three residences are considered to be on site; 20 residences are within 1/4 mile; and 185 are between 1/4 and 1/2 mile. A residential area of Bristow is located just south of the White's property across Sand Creek. Four residences are located just north of the east-west section line road which marks the northern extent of the refinery site.



Not To Scale

R.10 E. 96°



Contours Interval 20 Feet

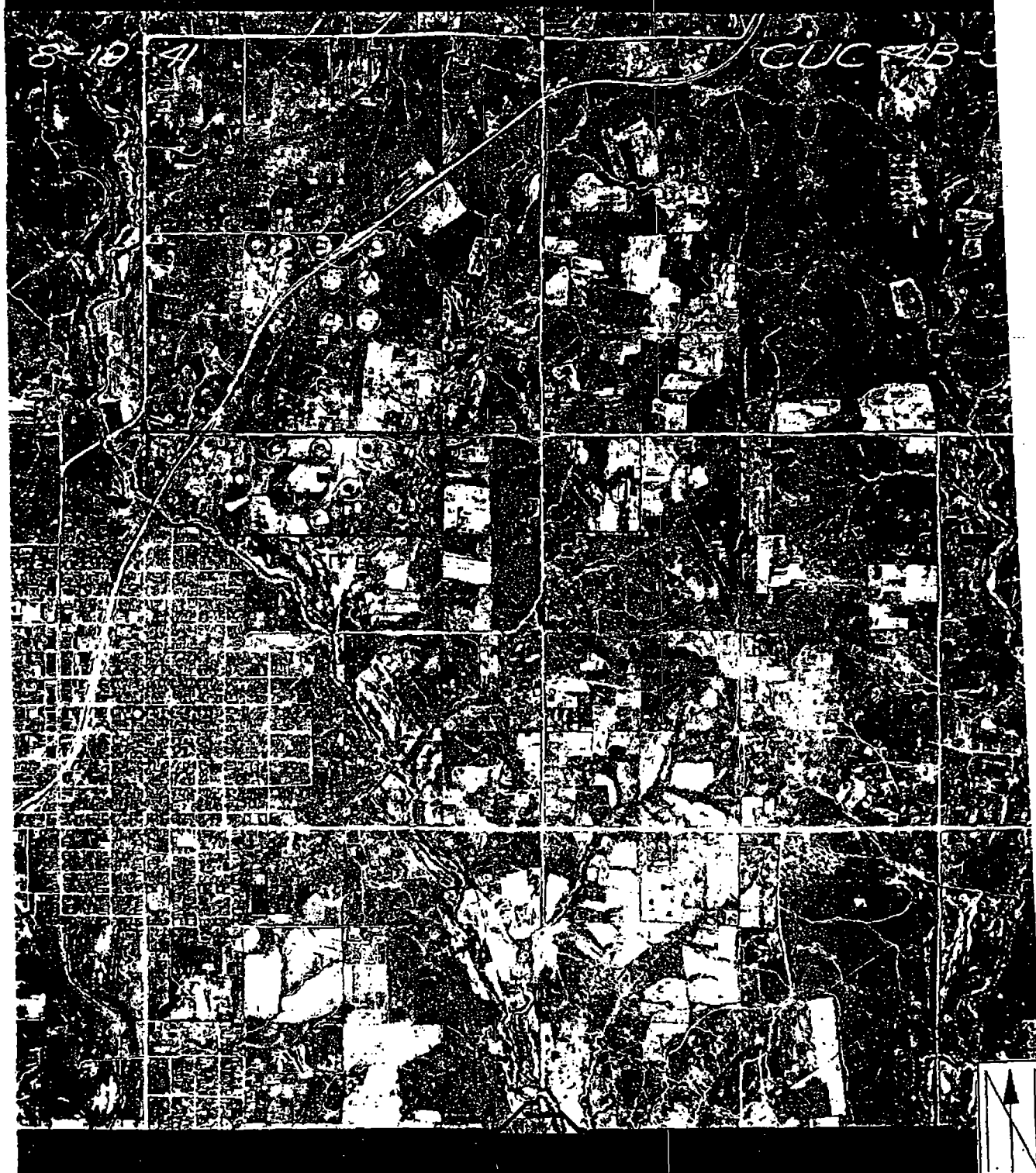


APPROXIMATE M.T.M.
DECLINATION, 1915

Edition of 1910, reprinted 1948.
Polyconic projection, North American datum

BRISTOW, OKLA.
N3545-W9616/15

KM10000060

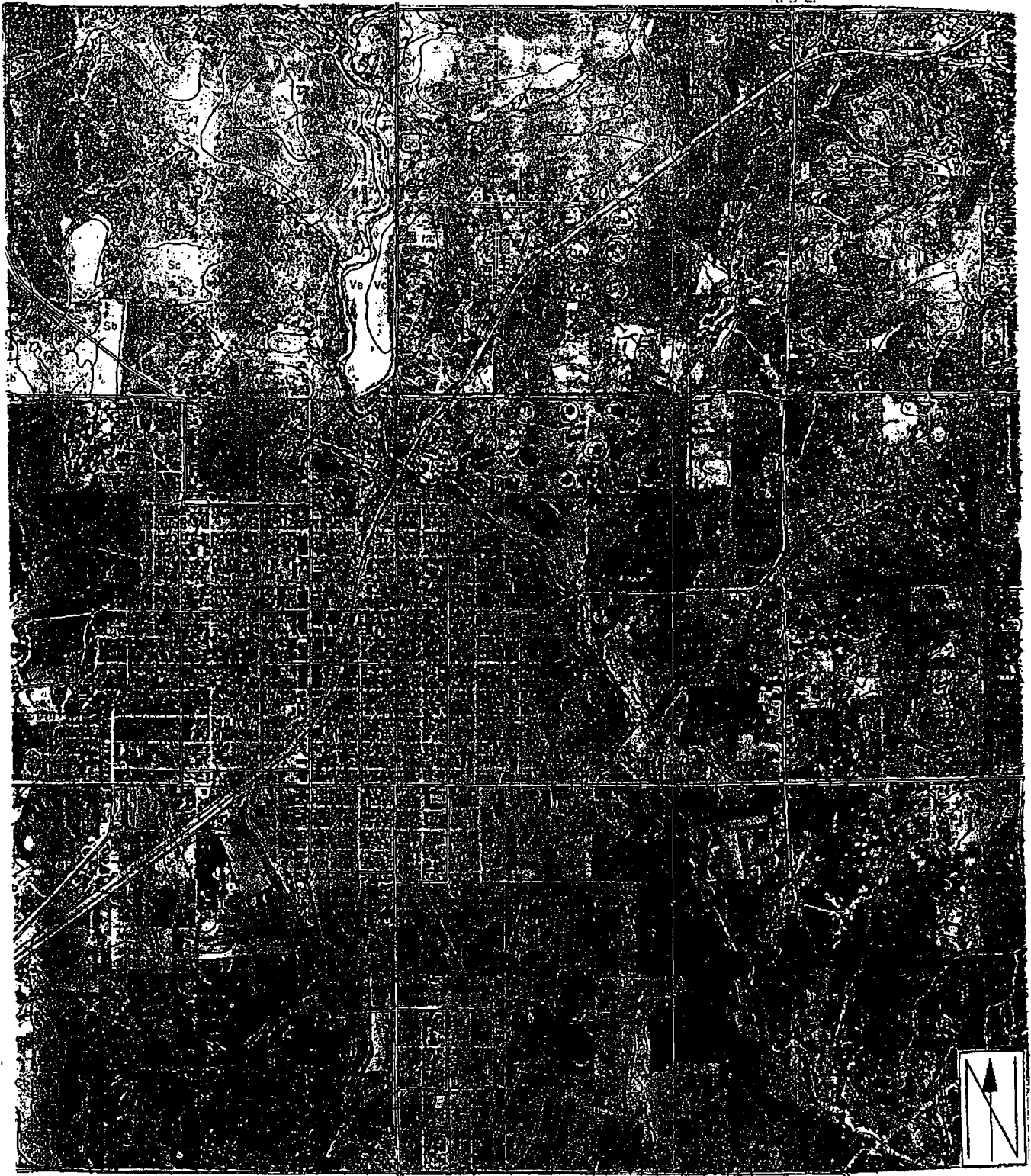


" B "

1949

CREEK COUNTY, OKLAHOMA

R. 9 E.



0 1/2 1 Mile Scale 1:20 000 0

K C

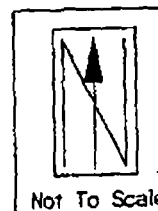
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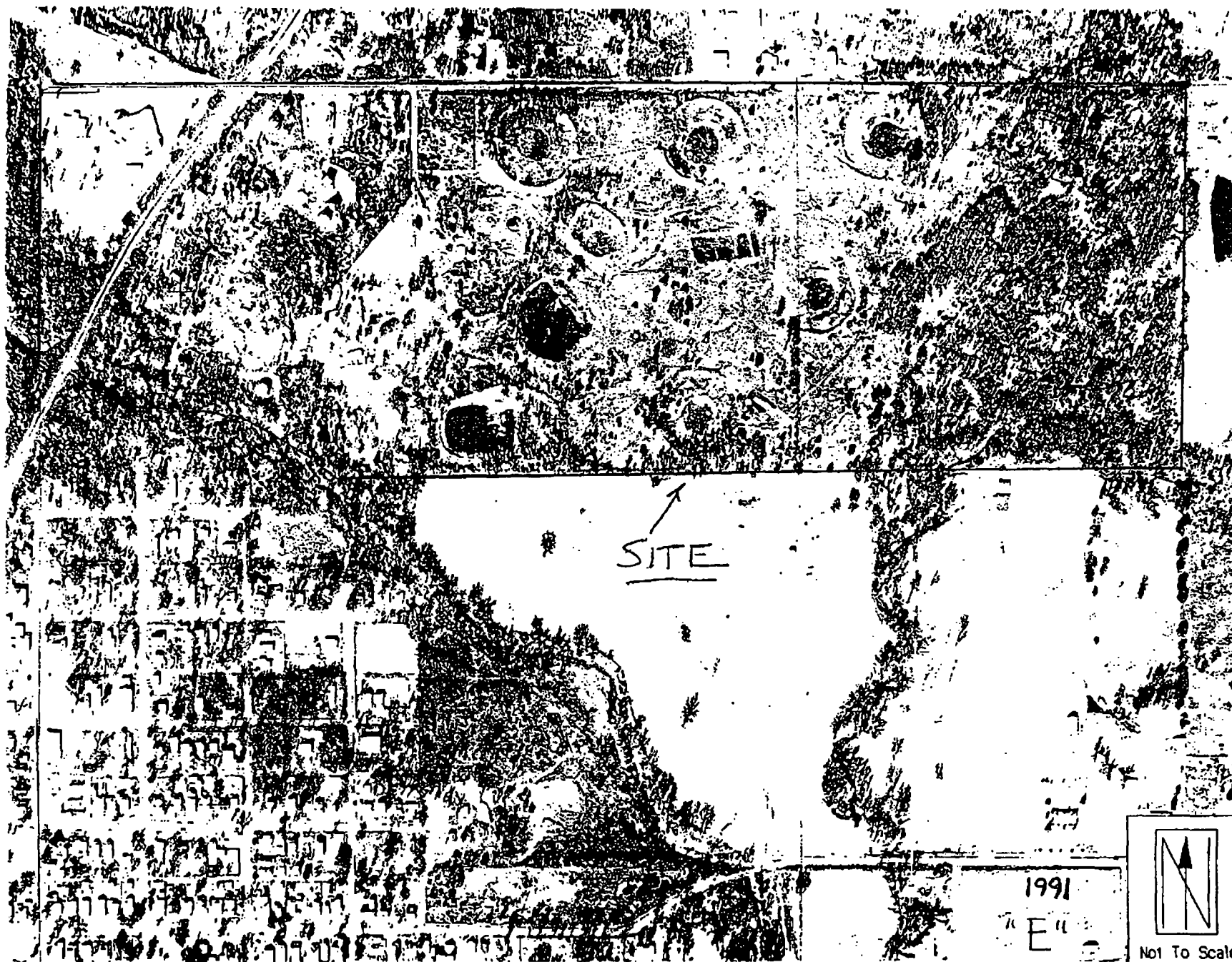
D



Not To Scale

KMI0000063

KM1000006-4



1991

"E"



Not To Scale

Reference 3

APPENDIX E

**STANDARD OPERATING PROCEDURE
TO DETERMINE SITE
LATITUDE AND LONGITUDE COORDINATES**

**HAZARDOUS SITE EVALUATION DIVISION
SITE ASSESSMENT BRANCH
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.**

September 1991

LATITUDE AND LONGITUDE CALCULATION WORKSHEET #2
LI USING ENGINEER'S SCALE (1/60)

SITE NAME: Wilcox Oil Co. CERCLIS #: _____
AKA: _____ SSID: _____
ADDRESS: North of Bristow
CITY: Bristow STATE: OK ZIP CODE: _____
SITE REFERENCE POINT: center of site
USGS QUAD MAP NAME: Bristow TOWNSHIP: 16 N/S RANGE: 9 E/W
SCALE: 1:24,000 MAP DATE: 1973 SECTION: 29 NE 1/4 NW 1/4 NW 1/4
MAP DATUM: 1927 1983 (CIRCLE ONE) MERIDIAN: Indian
COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 7.5' MAP (attach photocopy):
LONGITUDE: 96° 22' 30" LATITUDE: 35° 45' 00"
COORDINATES FROM LOWER RIGHT (SOUTHEAST) CORNER OF 2.5' GRID CELL:
LONGITUDE: 96° 22' 30" LATITUDE: 35° 50' 00"

CALCULATIONS: LATITUDE (7.5' QUADRANGLE MAP)

- A) NUMBER OF RULER GRADUATIONS FROM LATITUDE GRID LINE TO SITE REF POINT: 95
B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:
 $A \times 0.3304 = \underline{31.39}"$
C) EXPRESS IN MINUTES AND SECONDS (1' = 60"): 0° 31' 39"
D) ADD TO STARTING LATITUDE: 35° 50' 00.00" + 0° 31' 39" =

SITE LATITUDE: 35° 50' 31.39"

CALCULATIONS: LONGITUDE (7.5' QUADRANGLE MAP)

- A) NUMBER OF RULER GRADUATIONS FROM RIGHT LONGITUDE LINE TO SITE REF POINT: 97
B) MULTIPLY (A) BY 0.3304 TO CONVERT TO SECONDS:
 $A \times 0.3304 = \underline{32.05}"$
C) EXPRESS IN MINUTES AND SECONDS (1' = 60"): 0° 32' 05"
D) ADD TO STARTING LONGITUDE: 96° 22' 30.00" + 0° 32' 05" =

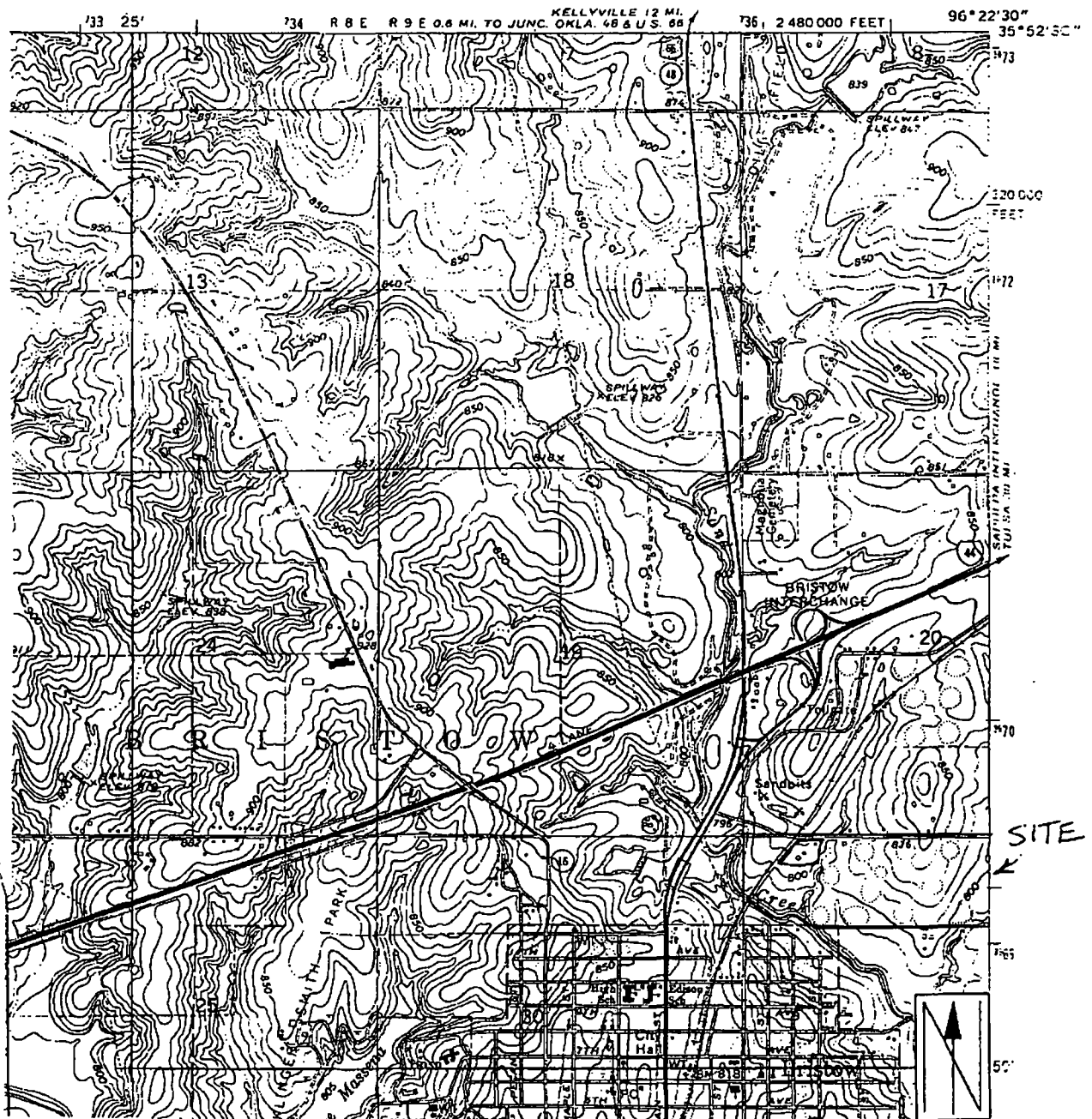
SITE LONGITUDE: 96° 23' 02.05"

INVESTIGATOR: Charles Cornell DATE: 6-16-94

SITE NAME:

Wilcox O.I.C.

NUMBER:



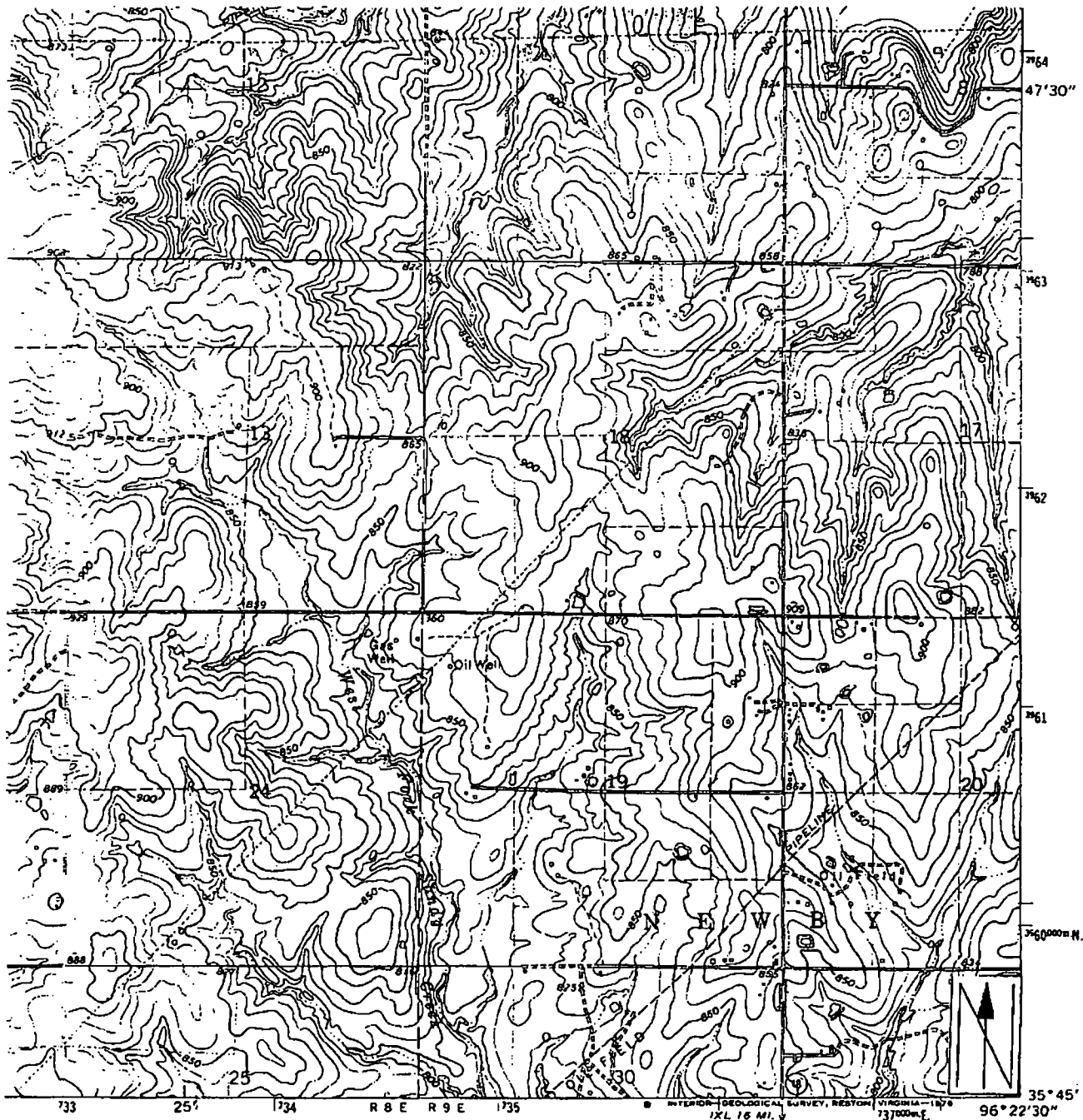
TOPOGRAPHIC MAP QUADRANGLE NAME:

Bristow

SCALE: 1:24,000

COORDINATES OF LOWER RIGHT-HAND CORNER OF 2.5-MINUTE GRID:

LATITUDE: 35° 50' 00" LONGITUDE: 96° 22' 30"



1 MILE
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VIRGINIA 22092
73069
EQUEST

ROAD CLASSIFICATION

Primary highway, hard surface.....	Light-duty road, hard or improved surface
Secondary highway, hard surface.....	Unimproved road.....

○ Interstate Route □ U. S. Route ○ State Route

BRISTOW, OKLA.
SW 1/4 BRISTOW 15' QUADRANGLE
N3545-W9622.5/7.5

1973

AMS 6755 IV SW-SERIES V883

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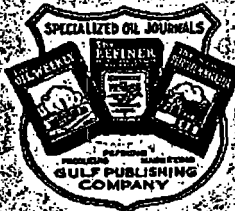
THE REFINER

and Natural Gasoline Manufacturer

Member Audit Bureau of Circulations

VOL. 9, No. 9

SEPTEMBER, 1930



GRADY TRIPLETT, Editor

GEORGE REID, Associate Editor

TABLE OF CONTENTS

Hydrogenation of Mineral Oils	67
By I. N. Beal	
Modern Installation in Brinkow Plant	72
By George Reid	
Vapors Redistill Treated Pressure Distillates	75
By Brad Miller	
Plant Employs Latest Scientific Practices	79
	82
Consumption in Refineries	83
By John S. Blais	
Sulfuric Acid Cycle	85
By Peter S. Gilchrist	
Production Costs and Product Costs	88
By R. E. Kerfoot	
Experiments on Sweating Paraffin	92
Concerns Dominate Refining Capacities	100
By George Reid	
Controlling The Price of Gasoline	107
By Alexander B. Morris	
Refining Unit Handles 290,000 Gallons Daily	119
Plant Operators Have Study Club at Seminole	124
Reads of Papers Before Chemical Sessions	131
Men and Methods	134
Refinery and Gasoline Plant Activity	140
Equipment for the Modern Plant	147
About Manufacturers	152

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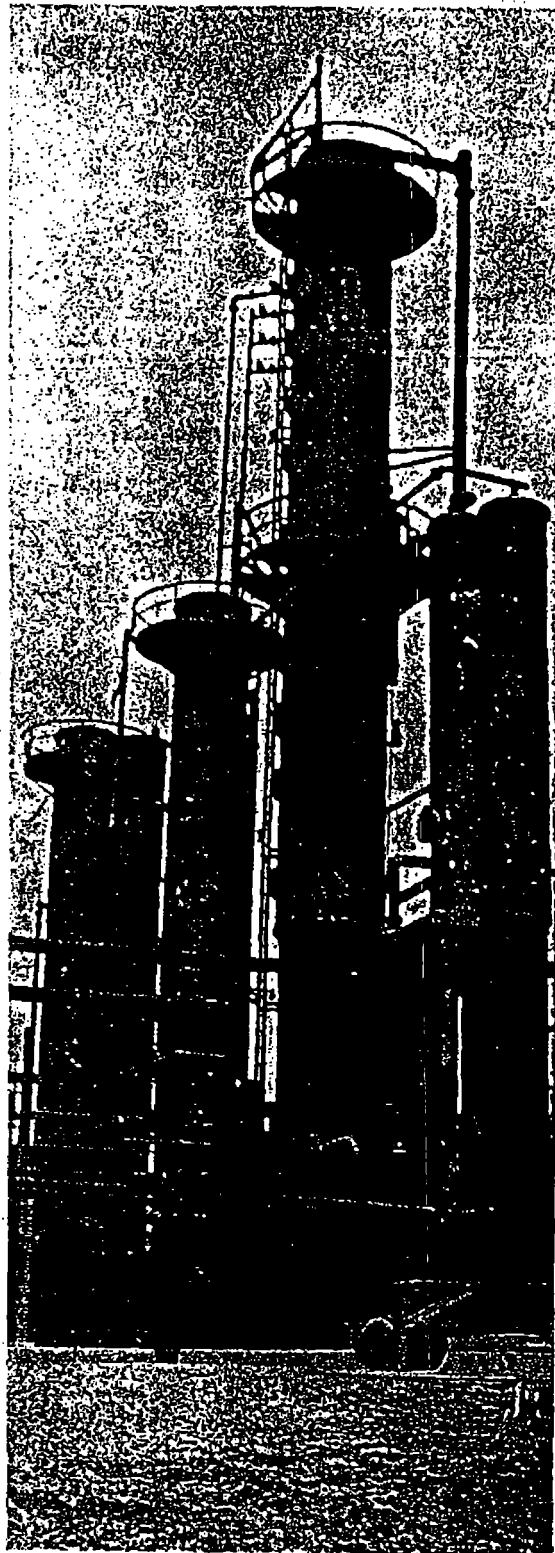
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Wilcox Has Installation Plant

WILCOX OIL & GAS COMPANY has been operating its new refinery at Bristow, Okla., for a little more than a year, during which time certain additions and changes have been made to secure products not originally required and to generally improve efficiency. The refinery is on the same site as the original 1000-barrel Wilcox experimental plant erected 10 years ago, which was operated under lease by Riley Petroleum Company in 1928, and which was completely dismantled to make erection of the new 4000-barrel modern skimming cracking plant. Decision to erect and operate refinery follows entry of the company into wholesale and retail marketing and subsequent expansion of these facilities in territory within a radius of 50 miles of the refinery. Like most modern installations of the type this plant consists of skimming plant, cracking unit, and redistillation battery, vapor recovery system and continuous distillation equipment.

The greater portion of the 4000-barrel crude requirements of the refinery is produced locally by the company, and as soon as it is practical the crude is brought direct to the plant from the field, thus eliminating expensive storage and handling facilities. However, this practice is conducive to relatively high percentages of b. & w. in the crude, which must be settled out before actual processing at high temperature. This is accomplished by means of preheating the fresh crude in a series of Cloverleaf

*Cloverleaf
Sections*

Fractionating equipment in connection with crude topping unit and pressure distillation re-run stills.

Modern tion Bristow

lan

By GEORGE REID
Associate Editor

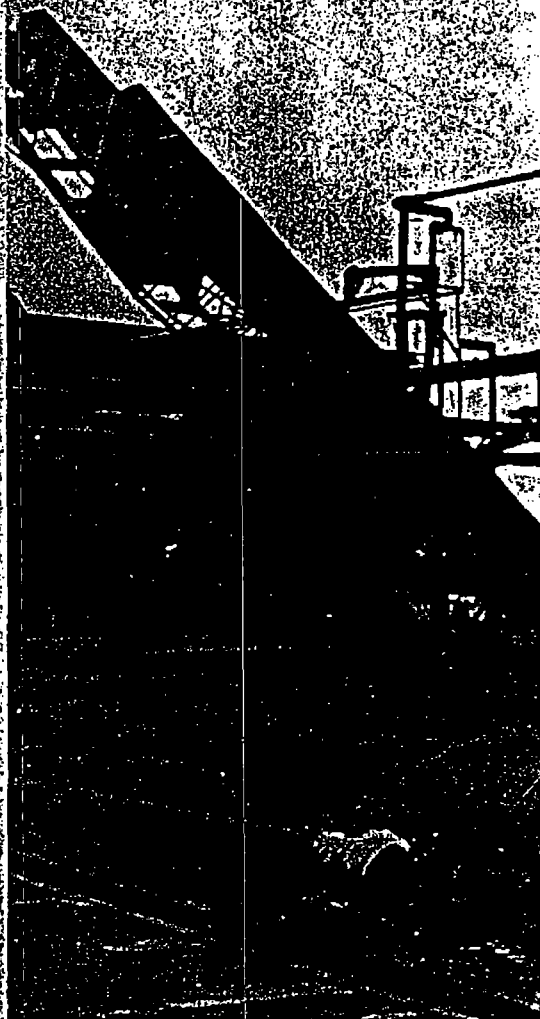
Y has in the uppermost section of the skimming unit
stow O heating column where the oil is preheated to
which 200° F.

From this point the crude passes into one end of
und by 24 foot horizontal settling drum (for
having seen years of service as a shell still)
the settling time is sufficient to let the foreign
will drop out of the oil. Clean crude is drawn
continuously from the front and top of the drum, and
d by w. is continuously removed from the front
skimming bottom of the settler.

The crude is then further preheated through coun-
ter through a series of exchangers, absorbing
from the residum leaving the base of the sepa-
ration column. The temperature is raised to about
17 before it enters the pipe still. This Winkler
distillation unit consists of 124 tubes 3 1/2
I. D. and 22 feet long, arranged in two con-
crete banks and one roof bank. As the oil leaves
the tubes it has been heated to about 520° F. and
at temperature it enters the bottom of the large
separating column.

The column was designed by the same engineering
firm and is six feet in diameter by 75 feet high,
contains 17 bubble decks and two blank decks,
which is approximately half way up the height
lower from which point a kerosene side stream
is removed; the other blank deck being just
above the top three bubble trays where a side stream
gasoline is removed. Former design called for

by means of this conveyor coke dropping from
the reaction chamber is loaded directly into
cars for shipment.



removal of a kerosene side stream into a flashing or stripper tower, and withdrawal of residuum through a similar flash tower, flashing both with superheated steam, and returning flashed vapors to the original column. Under the present practice the upper auxiliary tower or side stream produces a stream of 437 e. p. naphtha, and a 375 e. p. gasoline stream is taken off over head. Gas oil may be removed from the lower withdrawal equipment, and fuel oil is taken from the bottom. Condensed 375 e. p. gasoline is taken from a large water separator device and returned over the top of the column as a means of temperature control. This control is also aided by passing the incoming crude through the coils in the top of the tower. Residue is pumped from the tower by liquid level control into raw oil tanks for the Dubbs unit.

This change in design and in the number and type of products fractionated through the large bubble column is an example of the flexibility of modern rectifying equipment. With slight mechanical changes the operation of the tower may at any time be converted back to the original system or to meet some other requirements. The two grades of gasoline produced in this operation are given sodium plumbite treatment in a continuous treating system to meet Doctor and corrosion specifications.

CRACKING OPERATION

The Dubbs cracking unit is equipped with a 10 by 40 foot reaction chamber and late type modified Alcorn radiant heat furnace. Several changes in design were effected in this furnace and its operation. Special alloy beams have been installed to support the radiant shield getting the weight off of the tubes, the arch was removed, the number of tubes was reduced to 64 and the flow of oil was reversed. These

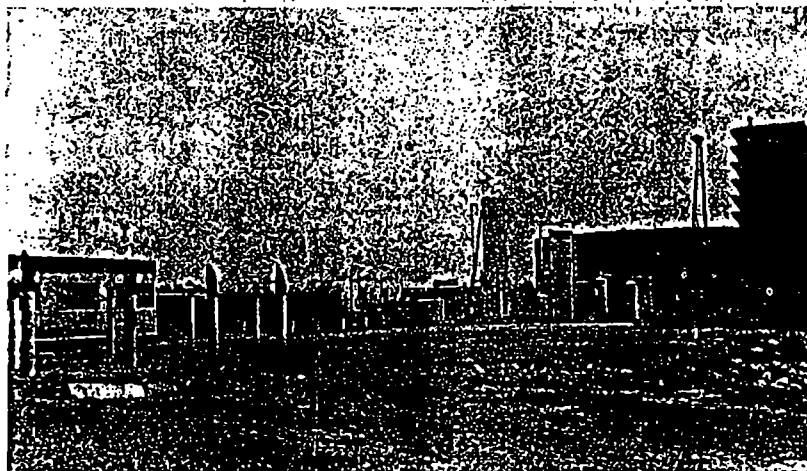
changes and other details were worked out by Dubbs Alcorn and Wilcox engineers, due to the new design of the furnace. The unit is operated in three day cycle running non-residuum. At present the production of topped crude is in excess of the capacity of the single Dubbs unit, and the company is considering the installation of additional cracking equipment.

Through the use of equipment designed for direct loading of coke into cars the coke production is handled but once at this plant. A spur track was built close to the reaction chamber from the nearby railroad. A conveyor with a hopper large enough to fit under the reaction chamber, is employed to dump the coke directly into the cars. As the 4200 foot cable is pulled from the chamber by means of a steam hoist, the electrically operated conveyor removes the falling coke, free of nuts, bolts, dirt and other foreign matter, spilling it into the cars. It is estimated that this conveyor has reduced the cost of handling coke about one dollar per ton, and as seven to eight hundred tons are handled monthly and sold on contract to a large industrial concern, there is real economy effected in this method of handling the product.

Pressure distillate from the cracking operation is taken to the treating department and treated with four pounds of 66° Be. acid per barrel and neutralized with 17° Be. caustic in a continuous system. The distillate is then taken to rerun stills. This system consists of two 12 by 30 foot shell stills equipped with bubble towers. Incoming 60 gravity pressure distillate is charged through Cloverleaf sections placed in the tops of the two bubble towers. After this preheating it enters the shell stills. Through the addition of a new stripper tower in connection with the second bubble tower, the rerun system is producing a fraction of stripped furnace oil of about

34 gravity. The bottoms are marketed as 28/30 gravity fuel oil. Overhead stream from the fractionating equipment is a premium grade 400 end point anti-knock motor fuel and marketed as such. A side stream of 425 end point gasoline is removed which is blended with the straight run gasoline.

Cracked gasoline from the rerun operation is given Doctor treatment in a continuous system. The straight run gasolines are given similar treatment. Two complete continuous



Compression gasoline recovery plant and gas washing equipment

(Continued on page 122)

to guard against loss of desirable fractions. Both the raw gasoline and reflux feeds is regulated by Foxboro controllers, the usual orifice arrangement being maintained.

The re-boiler and column temperatures are maintained within one-half of one degree of the desired temperature, the success of the stabilization depending largely upon this small deviation from the ideal temperature. The pressure on the stabilizing column is maintained within one-half pound of the desired pressure.

The regulator is on the water condensate from the re-boiler. Boiler pressure is maintained on the re-boiler, while the desired temperature is maintained by a half-inch regulator installed on the water condensate leaving the re-boiler. When the valve is closed, water covers the tube section, and when the valve is opened, water leaves the tower, allowing steam to cover the tube section and thereby increasing the temperature.

Liberal use of concrete for supporting such equipment, as the heat exchangers and condensers add strength to the installation and reduces the fire hazard. Elimination of buckling from steel platforms is also accomplished, in addition to a more attractive appearance. The ladder leading up the main column is enclosed by a barrel of heavy wire netting—an added safety factor for workmen.

Five large DeLaval centrifugal pumps are used for circulating water and moving the gasoline, two being for the former and three for the latter. All pumps are in a pit below the surface of the ground. The pump house is equipped with blowers to prevent accumulation of dangerous fumes.

The unit was designed and built by C. F. Braun and Company; actual arrangement of the equipment being largely in the hands of company engineers. Besides handling an almost unprecedented gallonage, the unit is one of the most attractive installations yet completed.

Wilcox Has Modern Installation in Bristow Plant

(Continued from page 74)

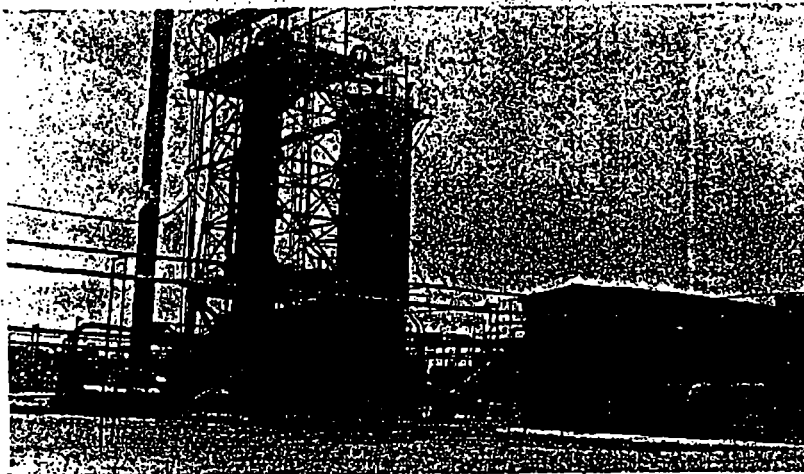
treating systems are provided for handling the light products, and agitators of the batch type were erected for kerosene treatment.

A recent addition at this plant is a compression type gasoline recovery installation for which gases and vapors are gathered from the skimming plant receiving house, the redistillation plant receiving house, light product storage and crude tanks. Yields from these vapors run from two to six gallons per 1000 cubic feet. The plant production ranges from

4000 to 5000 gallons per day. Gases from the Dubbs unit operation are to be processed through an absorption type recovery unit planned for early installation. Vapors from the pressure distillate rerun operation are first scrubbed through alkaline solution before they are compressed.

The compression plant consists of four 80-horsepower Bessemer machines operating at 40 pounds on the low stage side and 175 pounds on the high stage side.

Early in the construction of the new refinery P. L. Tinkler joined the organization as construction engineer. He supervised the installation and design of facilities, and upon completion of the plant was made superintendent of its operation, and has directed the modifications and additions to the plant as discussed in this writing. We are indebted to Mr. Tinkler for his helpfulness and his permission to present the details of plant operations.



Cracking equipment at Wilcox Oil & Gas Company's Bristow, Oklahoma, refinery

Reference 5

MEMORANDUM

December 28, 1994.

To: Wilcox Oil Company Preliminary Assessment (PA) file.

From: David Cates.

Re: Records of Communication.

The following messages are summaries of conversations with various people related to the Preliminary Assessment (PA) report for the Wilcox Oil Company CERCLIS site. The entries are arranged in chronological order.

- A. 11/28/94 & 12/01/94: Spoke with Danny Trout of the Bristow Public Works Department at (918) 367-5588 concerning the Bristow public water supply system. He conveyed the following information. The City of Bristow municipal water supply system has eight active wells which are connected via a distribution network to four water storage towers. The towers and wells are interconnected forming a blended system with line taps occurring before and after the towers. The system serves 4,300 people in Bristow and 116 people in Slick, Oklahoma. Water supply to the system is obtained from wells only. The water is chlorinated at the well head. Three of Bristow's eleven wells reported to be active on the public water supply database (#'s 3, 7 & 21) are no longer part of the system. Well #7 which is incorrectly located on the data base has been plugged and abandoned as a result of deactivating an underground water storage system to which it was connected. The correct location of this well was in the NE/4 SE/4 NE/4 of Section 30-T16N-R9E instead of R8E, which puts it about one quarter mile southwest of the Wilcox Oil Company refinery site. Well #3 is apparently plugged and abandoned, also. Well #21 was given to Mid-America Cafe who presumably are using it for water supply. Well #18 is incorrectly located on the public water supply data base also. It should be in the SW/4 SW/4 SE/4 of Section 25-T16N-R8E instead of in the SW/4 SW/4 SW/4 of the section. A hand dug well which has the dimensions of 30 feet in diameter by 200 feet deep was reported to be located in the NW/4 NE/4 NE/4 of Section 31-T16N-R9E. This municipal water supply well has the capability of producing but is currently shut down. An industrial well owned by McAdams Pipeline Company about 200 feet deep that supplies drinking water to workers was reported in the SE/4 SE/4 of Section 19-T16N-R9E. The company is not on city water. The well is not shown on any of the public information because apparently it was drilled in the 1950's prior to record keeping. Well #15 which was located in the SW/4 NE/4 SE/4 of Section 30-T16N-R9E, about one half mile southwest of the site, was supposedly abandoned because of diesel contamination following a train derailment. No other wells have been reported to be abandoned because of contamination. Three of Bristow's water supply wells are high capacity wells (#'s 20, 22, & 23), producing 200 gpm each. The other five wells (#'s 14, 16, 17, 18, 19) are small capacity wells which produce at rates from 50 gpm to 90 gpm. There are no annual production records.

The daily production for these wells when active is: 72,000 gallons each for #'s 14 & 16; 100,000 gallons for #17; 129,000 gallons each for #'s 18 & 19; and 288,000 gallons for #'s 20, 22 & 23. Not all of the wells are produced at once. Instead, two large capacity wells and one small capacity well are pumped together on a daily basis. Under this scheme either of the large capacity wells produces more than 40 percent of the daily water production. The specific wells in this production scheme are changed periodically. The average daily production is 400,000 gallons; the storage capacity is 1,500,000 gallons; and the total production capacity is 1,152,000 gallons. Records indicate there are two mobile home parks which have their own public water supply wells. Fogle mobile home park is currently on city water and their well is reported to be inactive. It is unknown whether or not this well has been plugged and abandoned. The church and the White's residence on site are supplied with city water via a 2 inch line installed by the Whites. The records show that a water supply well 120 feet deep serves 50 people of the Evergreen trailer park.

- B. 12/02/94: Had telephone conversation with Doug McCurley with Meyer Engineering at (405) 755-5325 concerning annual production from individual wells for the city of Bristow. He could not provide any pertinent information to resolve whether or not any of the wells provided more than 40 percent of the annual water production. He mentioned that Bristow provided water to the Slick Rural Water Authority (RWA).
- C. 12/05/94: Had telephone conversation with Cissie Gaskins of the Slick Rural Water District at (918) 367-5558. She confirmed that Bristow supplies water to the Slick rural water Association (RWA) which serves 116 residences.
- D. 12/06/04: Had telephone conversation with Becky Simmons of the Creek County Tax Assessors office at (918) 224-4508 concerning ownership of the property in the NE/4 NW/4 NW/4 of Section 29-T16N-R9E. She informed me that Jack and Arthur White (at Rt. 1, Box 166, Bristow, OK, 74010) owned 13 acres with this legal description.
- E. 12/07/94: Had telephone conversation with Jack White, co-owner of the original site of the Wilcox Oil Company refinery, at (405) 367-3167 in response to our letter and access agreement. He wanted his attorney, Mike Jones, to draft another agreement which specifies a time limit for access and he wants us to sign personal injury liability waivers. He informed me that Phil Elias is the owner of about 100 acres east of his land which was the site of storage tanks and sludge pits of the tank farm of the old refinery and his son Arthur could provide Mr. Elias' telephone number. He informed me that he had three wells on his property. Two were water wells and one was an oil well. The two water wells were drilled to about 200 feet and were abandoned because of oil contamination from upper strata in one case and because the casing collapsed after cementing in the other well. Only one of the wells has been plugged and abandoned. The oil well was contaminated down to 40 feet; it was cleaned out then plugged. The water well had gasoline and diesel from 40-60 feet. Most of the area is now supporting trees and other vegetation. For a long time trees would not grow in the yard of the house on site where his youngest son lives. There

is still an area about 100 feet by 150 feet that is barren of vegetation and contains soft knee soil. He said he would get a copy of the aerial photos from the Soil Conservation Department for me. I could pick them up from Jack, his son and co-owner, at White's Muffler and Radiator Shop at 5th and main in Bristow. Roy, his youngest son, lives on site with his wife. He bought the fenced area which has about 18 acres which is more than the deed specifies (13 acres). He has an abstract. There were three refineries in Bristow. One operated until the 1930's; one operated until the 1950's; and the Wilcox Oil Company refinery operated until the early 1960's. The land, buildings, equipment and tanks were auctioned off in 1966 or 1987; with requirements for the tanks, equipment, buildings, etc., to be removed in 90 days. Three 50,000 barrel tanks were still standing in the 1970's on the property to the east where cattle have been lost in the bermed areas and one person was injured during salvaging of the tanks. The Whites are salvaging scrap steel from the tanks and pipe inside the fenced area. There are two 5,000 barrel tanks remaining and 6 or 7 have been salvaged.

- F. 12/08/94: Had telephone conversation with Mike Jones, the attorney for Jack and Arthur White at (918) 367-3303. I informed him that we were working as contractors for the EPA; told him about the PA site reconnaissance procedure; talked about the next step beyond the PA, the SI; discussed liability issues of current land owner; and let him know about the petroleum exclusion clause. He said he would try to put together an agreement for us to sign that restricts access to the site in terms of a time limit and relinquishes the Whites from any personal injury liability resulting from an accident. He said he was very busy and would try to get to it in a week or so. I let him know that this was too long and asked him to fax it tomorrow. After one week we still had not received a fax. Barbara Rausch composed an agreement and we faxed it to Mr. Jones' office. It was reviewed by Arthur White and met with his approval.
- G. 12/09/94: Had telephone conversation with a person at the Creek County Tax Assessors office concerning the ownership of the land in the NE/4 NW/4 and the NW/4 NE/4 of Section 29-T16N-R9E. I was informed that Ann Montgomery owned 78.25 acres at this legal description.
- H. 12/09/94: Met with Arthur White at White's Muffler and Radiator shop on 5th and Main in Bristow. Picked up an aerial photo his father had acquired and got a telephone number for Phil Elias. Told me about two water wells they drilled on the property to around 200 feet in depth. One produced gasoline after pumping for a day from open hole below the surface casing which was set at about 40 feet. It was plugged back by adding successive volumes of sand then cement until the cement filled inside the surface casing. The casing in the other well collapsed during cementing. They tried to drill it out without success. The oil well that was mentioned by Jack White did not exist. He confirmed what his father had told me by recounted the history of the property. He added that INCOG had been conducting a study of Sand Creek a few years ago.

-
- I. 12/12/94: Had conversation with Mike Houts with the Oklahoma DEQ at (405) 271-7899 concerning Well Head Protection Areas (WHPA) around Bristow. He said there were not any around Bristow at this time.
- J. 12/12/94: Had telephone conversation with Al Coulter at (405) 271-7054 concerning any complaints that may have been reported on the Wilcox refinery site. He said according to his knowledge there were none.
- K. 12/12/94: Had telephone conversation with Lynn Moss of the Environmental complaints and local services (ECLS) of the OKDEQ at (405) 271-4468 concerning any complaints that may have been reported on the Wilcox refinery site. She has the records for the Department of Pollution Control (DPC) which was a part of the Oklahoma Department of Public Health (OSDH). She said no complaints have been reported. She indicated that the records of complaints go back to 1977 for the DPC; 1980 for the Water Board; and 1984 for the Health Department.
- L. 12/12/94: Had telephone conversation with Robert Huber with the Creek County Health Department at (918) 224-0249 and (918) 367-5588 concerning any complaints that may have been reported on the Wilcox refinery site. He was not aware of any complaints on a Wilcox Oil Company, but said he would check his files under the legal description I provided to him and get back in touch with me later.
- M. 12/12/94: Had telephone conversation with Roland Belveal with the local office of the Corporation Commission in Bristow at (918) 367-3396 concerning any complaints that may have been reported on the Wilcox refinery site. He had nothing to report.
- N. 12/12/94: Had telephone conversation with Margret Graham with OKDEQ and formerly with the OWRB at (405) 271-1400 concerning any old OWRB files on the Wilcox refinery site. She reported that no files exist on this refinery and that the earliest OWRB records would be 1969.
- O. 12/13/94: Had telephone conversation with Beth Garner of the Oklahoma Secretary of State's office at (405) 521-3911 concerning Wilcox Oil Company. She indicated that there is not a company by that name "in good standing" with the State at this time. However, a record search turned up an Oklahoma corporation called Wilcox Oil Company which operated "in good standing" from 11/17/75 to 2/28/77 when it was suspended by the Oklahoma Tax Commission. A Delaware corporation called Wilcox Oil Company operated "in good standing" from 8/28/44 through 7/24/64 when it withdrew. On the same day (7/24/64), a Delaware corporation called Wilcox Oil Company filed with the State Department to begin operations in Oklahoma. This company was involved in a merger in 9/24/65 of which the surviving company was Tenneco Oil Company, a Delaware corporation. Tenneco is operating "in good standing" in Oklahoma at this time.
- P. 12/14/94: Had a telephone conversation with Richard Smith of INCOG at (918) 584-7526 concerning a stream survey of Sand Creek. He said that INCOG conducted

a study on the Little Deep Fork 1987 and 1988 upstream and down stream of Bristow and Depew related to impacts on the creek environment waste water effluents from the two towns. He reported that no samples or measurements of stream flow were taken on Sand Creek since it was not flowing at the time of the study (summer of 1987).

- Q. 12/16/94: Met with Arthur White at about 11:30 p.m. and entered his property (NE/4 NW/4 NW/4 of Section 29) for a site reconnaissance. He said they were in the long term process of salvaging the old storage tanks for scrap iron and pipes for fence posts. He said he plans to use the two tanks at the northwest corner of the property for storage; plans to clean out the old structures to make them useable; and plans to bury the old concrete foundations and tanks/tower pads. He said that there were only two water wells drilled on the property and that both had been plugged and abandoned.
- R. 12/16/94: Met with Virginia and Dale Floyd at the Bristow First Assembly of God Church where he is the pastor. They live in the home just west of the church. He showed us some areas of contaminated soil where grass would not grow. He pointed out an area where he observed oil? seeping into Sand Creek just southwest of the church. The seep was not visible this day because of high water from run off of rain received the previous night. He showed us a contaminated water well in a pump house located just southwest of the church and an open cased well or riser located in the middle of the field south of the church. He said that the mobile home also located just south of the church would be the residence of the new pastor. He informed us that Dale Allen, a church member, at (918) 367-5662 could provide some information about the construction of the contaminated water well. He said that the church is not using the well anymore and that they and the church are on city water which is provided by a 2 inch line installed by the Whites. He commented that the line breaks frequently where it crosses Sand Creek.
- S. 12/16/94: Met with Phil Elias on his property (NW/4 NW/4 & NE/4 NW/4 of Section 29) at about 1:00 p.m. and viewed some of the tank farm remnants (asphalt-like tank bottom sediments and oily sludge inside the remaining retention berms for the 50,000 barrel storage tanks). Recent evidence of earth work was observed where several berms had been cut and some had been leveled off. He said that he was trying to clean up the land surface in order to sell several subdivided tracts. He said that people enter the property frequently for hunting.
- T. 12/19/94: Had telephone conversation with Noel Osborne of the Oklahoma Water Resources Board (OWRB) at (405) 231-2577 concerning date when water well drillers were first required to report drilling and completions of water wells and bore holes. She indicated that they were first required to report in 1982. Prior to that date scant information on water well locations will be available.
- U. 12/20/94: Had a telephone conversation with Dale Allen at (918) 367-5662 concerning the water well of the Bristow First Assembly of God Church. He is a

member of the church and has worked on the well. The well was drilled in 1989 or 1990 to a total depth of about 110 feet. During drilling, a water zone at 40 feet and an oil zone from 20 to 40 feet were encountered. The well was cased and perforated from 40 to 110 feet. It was equipped with a activated carbon filter system for treatment of the petroleum produced with the water. Rain-soft Water Treatment Systems installed the system. The church used the well for about one year then converted back to city water because the petroleum overloaded the treatment system and produced taste and odor problems. He reported that the filter was backflushed every one to two months which would recover about 1 to 2 gallons of crude oil, but the water still had bad taste and odor. He also reported that while digging the ditches for lateral lines, oil was encountered at about 2 feet below ground level.

Reference 6

MEMORANDUM

December 12, 1994.

To: Wilcox Oil Company Site Preliminary Assessment (PA).
 From: David Cates, Environmental Specialist, Superfund (Site Assessment Unit).
 Re: Potentially Responsible Party (PRP) Search.

A PRP search was conducted on December 9, 1994, concerning an abandoned oil refinery near Bristow, Oklahoma, in Creek County. The refinery appears to be owned and operated by Wilcox Oil Company from the mid 1920's to early 1960's. The original refinery site covers approximately 13 acres in the NE/4 NW/4 NW/4 of Section 29-T16N-R9E and is located about 0.75 miles northeast of the Bristow City Hall. Records from the tax assessor's office indicate that Jack and Arthur White are the current owners of the site. The current owners of the site and surrounding properties are presented in the following table.

PROPERTY OWNERS	ADDRESS	PROPERTY LOCATION	AC	AT
Jack and Arthur White	Rt 1, Box 166 Bristow, OK 74010	NE NW NW 29-T16N-R9E	13	A
First Assembly of God Church	Rt 3, Box 1 Bristow, OK 74010	NW NW NW 29-T16N-R9E	7	B
Ann Montgomery	Box 659 Bristow, OK 74010	NWNE & NENW 29-T16N-R9E	78.85	C
C.P. Mercer & M. Aline	3607 Jasmine Ln Rowlett, TX 75088	S1/2 NWNW 29-T16N-R9E	11.25	D
Leon S & Allene Batey	PO Box 465 Bristow, OK 74010	SE NW NW 29-T16N-R9E	3.60	E
Kenneth O. Fugate	8305 East 7th Tulsa, OK 74112	SESW, NESW & NWSE of 20-16-9	67.68	F
Falcon Oil Properties	Box 988 Bristow, OK 74010	SWSW 20-T16N-R9E	3.25	G
Betty Laye Shelton % Jessie Oliver	1423 North Boston Tulsa, OK 74106	SWSW 20-T16N-R9E	5.70	H
Bristow First Assembly of God Church	Route 9, Box 1 Bristow, OK 74010	SWSW 20-T16N-R9E	1.75	I

A detailed title search was also conducted concerning the site ownership back to October 11th, 1928, when H.F. Wilcox Oil Company acquired a general warranty deed to the site covering approximately 10 acres located in the NE/4 NW/4 NW/4 of Section 29 from A. A. Rollestone (Attachment J). Wilcox Oil Company, a Delaware Corporation, transferred title to Wendel H. Sandlin on November 1st, 1963, thus establishing a 35 year period of operations (Attachment K). The property went through several different owners after Wendel Sandlin until being transferred to Jack White, the current co-owner, by J. M. and Kinis Bankston on March 27th, 1973 (Attachment L). The details of these ownership transfers are shown in the following table.

GRANTOR	GRANTEE	DOC	DATE	BK	PG
Jack White	Arthur & Jack White	WD	1/22/79	69	1348
J. M. Bankston	Jack White	WD	3/27/73	17	595
V. R. Lee	J. M. Bankston	WD	4/21/67	1025	197
C. W. & Faye Stradley	V. R. Lee	Cor WD	3/6/67	1022	484
C. W. & Faye Stradley	V. R. Lee	WD	3/6/67	1021	403
Bolin Oil Company	C. W. Stradley	Inden- ture	7/15/66	1007	612
Tenneco Oil Company	D. H. Bolin	Deed	6/14/66	1006	482
Wendel H. Sandlin	Tenneco Oil Company	GWD	12/16/65	994	19
Wilcox Oil Company	Wendel H. Sandlin	QCD	11/1/63	943	434
A. A Rollestone	H. F. Wilcox	GWD	1/4/29	371	227

According to the Oklahoma Secretary of State's office, there are currently no companies in Oklahoma operating "in good standing" named Wilcox Oil Company. Their records showed that an Oklahoma corporation called Wilcox Oil Company, operated in Oklahoma from 11/17/75 to 2/28/77 at which time it was suspended by the Oklahoma Tax Commission. A Delaware corporation named Wilcox Oil Company operated "in good standing" in Oklahoma from 8/28/44 until it withdrew on 7/24/64. On the same day (7/24/64) a Delaware corporation named Wilcox Oil Company filed with the State Department and operated "in good standing" until 9/24/65 when it merged with another company. The surviving company was Tenneco Oil Company, a Delaware corporation, which is currently operating "in good standing" in Oklahoma.

The ownership map (Attachment M) shows that H. F Wilcox Oil Company owned more than the approximately 10 acres of land considered to be the original refinery site which was described previously as being in the NE/4 NW/4 NW/4 of Section 29. The map indicates

an additional 20 acres of land both west and east of the St. Louis and San Francisco Railway plus approximately 80 acres underlying the NE/4 NW/4 and the NW/4 NE/4 of Section 29 was owned by H. F. Wilcox Oil Company. The Quit Claim Deed dated November 1st, 1963, between Wilcox Oil Company, the grantor, and Wendel H. Sandlin, the grantee, records the transfer of 110 acres, more or less, of land in four tracts in section 29 (Attachment K). This confirms the ownership of additional lands by Wilcox Oil Company as shown on the ownership map cited previously. The scope of the PRP search may be expanded to include the lands surrounding the original site. However, only partial research has been done on these tracts, namely the Quit Claim Deed (Attachment K) mentioned above and the tax assessors records of current owners in the Table above.

Records at the Creek County tax assessor's office indicate Ann Montgomery owns the 78.85 acres located in the NW/4 NE/4 and NE/4 NW/4 of Section 29. However, this land is currently owned by Phil Elias, whose address % Elias Oil Company is: 709 S. Roland, Bristow, OK, 74010. Since this ownership did not show up on the county tax assessors records transfer of title must have taken place fairly recently. As mentioned above, titles in the county clerk's office were not researched for this property.

The St. Louis and San Francisco Railroad should also be considered as current land owners. However, it is only assumed that they own the land within the right of way.

Contact Persons:

Betty Rentz, County Clerk, Creek County Courthouse, Sapulpa, Oklahoma: (918) 227-6304.

Creek County Tax Assessor's Office, Sapulpa, OK: (918) 224-4508 (Becky Simmons & Doreen Miller).

Jack White, partial site co-owner, (918) 367-3167 (home).

Arthur White, partial site co-owner, % White's Muffler & Radiator Shop, 5th & Main, Bristow, OK: (918) 367-6540, 367-5621 (home).

Mike Jones, attorney for Jack & Arthur White, (918) 367-3303, 367-5856 (Fax).

Virginia & Dale Floyd, Pastor of Bristow First Assembly of God Church & wife: (918) 367-2070 (church), 367-2670 (Home).

Phil Elias, partial owner of site, % Elias Oil Company, 709 S. Roland, Bristow, OK, 74010, (918) 367-3650, 367-9817 (home).

Print Key Output
5738551 V2R3M0 931217
Display Device : W4
User : VIRGINIA

S1041796

Page 1
12/09/94 10:52:25

Owner Id: 042776

Book: 002

WHITE JACK
RT 1 BOX 166

ARTHUR B
BRISTOW

OK 74010000

Property Description
#1 A TR OF LAND NW NW BEG AT NE COR #2 NW NW S387.3' S41D45' W571 W595
#3 TO E(LY) R.R R/W TH NE(LY)AL R/W #4 1000' TO N LINE TH E511.6' TO PG
#5 B 29-16-9 #6 BK 69 PG 1348

(number)(sfx) (dir) (street name) (type)
Property Address: WEB469

	Acres	Lots	Cd	Land Value	Assessed	Market	Cd	Improvement	Value	Sta	Exemption
Tx	1300		A2	1155	9629	A2		1260	10500	I	
Un											
Taxing Jurisdictions											
Schl	City	County	Misc. Codes	Mtg Co	Sale	Last Chgd	Value	Last Chgd	Perm. Exempt:		
02R		0019		Code	Yr Num	03/10/89 By	03/10/89 B:	KARLA KARLA			

Prop# 16 0929 00 0008 100 - 000 00

READY TO UPDATE MASTER RECORD

Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Appr 8-Value Brkout 9-More Legal
10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

A

Print Key Output
5738SS1 V2R3M0 931217
Display Device : W4
User : VIRGINIA

S1041796

Page 1
12/09/94 10:52:02

Owner Id: 012554 Book: 003
FIRST ASSEM OF GOD CHURCH (BRISTOW)
NON-TAXABLE

Property Description
#1 29-16-9 PT NW NW LYING N & W OF #2 R/W SF & SL RY CO LESS TR SOLD
#3 TO CONT REF CO #4
#5 BK 89 PG 569 #6 (69 SCHULT VIN 87516 HERE)

(number)(sfx) (dir) (street name) (type)
Property Address: F18493

	Acres	Lots	Cd	Assessed	Market	Cd	Assessed	Market	Value	Sta	Exemption
[Tx	700									N	
Un											
Taxing Jurisdictions											
Schl	City	County	Misc. Codes	Code	Tr	Num	03/06/91	By	DEBBIE		
02R		0019									

Prop# 16 0929 00 0017 100 - 000 00

READY TO UPDATE MASTER RECORD

Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Apr 8-Value Brkout 9-More Legal
10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

B "

Print Key Output
 5733SS1 V2R3MO 931217 S1041736 12/09/94 Page 1
 10:51:06
 Display Device : W4
 User : VIRGINIA

Owner Id: 027446 Book: 008
MONTGOMERY ANN [BOX 659
 BRISTOW OK 74010000

Property Description
 #1 NW NE AND NE NW LESS BEG AT NW #2 COR NE NW E 25'; S33'; FOR POB; E
 #3 200'; S250'; W 200'; N250' TO POB #4
 #5 29-16-9 #6 BK 325 PG 1053-54

(number)(sfx) (dir) (street name) (type)
 Property Address: T18463

		Land Value		Improvement Value		Sta	Exemption	
Acres	Lots	Cd	Assessed	Market	Cd	Assessed	Market	tus
Tx	7885	A1	740	6171				U
Un								

Taxing Jurisdictions Mtg Co Sale Last Chgd Value Last Chgd
 Schl City County Misc. Codes Code Yr Num 07/19/94 By 03/29/91 By
 02R 0019 DOREEN EARLINE3

Prop# 16 929 5 100 000 00
 PROPERTY NUMBERS DO NOT MATCH; TRY AGAIN.
 Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Apr 8-Value Brkout 9-More Legal
 10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

" C "

Print Key Output
 5738SS1 VZR3M0 931217 S1041796 12/09/94 10:53:43 Page 1
 Display Device : W4
 User : VIRGINIA

Owner Id: 026754 Book: 006
MERCER C P AND M ALINE [3607 JASMINE LANE
 ROWLETT TX 75082

Property Description
 #1 29-16-9 BEG NE COR NW NW TH W516 #2 ' TO E LINE RR R/W TH SWLY ALONG
 #3 E LINE R/W TO PT OF INTERSECTIO #4 N OF E LINE RR R/W WITH CENTER L
 #5 INE OF SAND CREEK TO S LINE NW N #6 W TH E ALONG S LINE NW NW TO SE

(number)(sfx) (dir) (street name) (type)
 Property Address:

		Land Value		Improvement Value		Sta	Exemption				
Tx	Acres	Lots	Cd	Assessed	Market	Cd	Assessed	Market	tus	Reg	Dbi
Un	1125		A2	630	5250				U		
Taxing Jurisdictions											
Schl	City	County	Misc. Codes	Mtg Co	Sale	Last Chgd Value		Last Chgd			
02R		0019		Code	Yr Num	04/28/92 By		04/28/92 By			
						ROBIN		ROBIN			

Prop# 16 0929 00 0062 106 - 000 00
 READY TO UPDATE MASTER RECORD
 Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Apr 8-Value Brkout 9-More Legal
 10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

" D "

Print Key Output
5738SS1 VZR3MO 931217
Display Device : W4
User : VIRGINIA

S1041796

Page 1
12/09/94 10:53:15

Owner Id: 062017

Book: 006

BATEY LEON S & ALLENE

[P O BOX 465
BRISTOW

OK 74015

Property Description	
#1 29-16-9 TR BEG PT S89°55'5"E25'	#2 TH S00°23'15"E387.30'FR NE COR
#3 NW NW TH N89°55'5"W25'TH S41°49'	#4 S5°W574.92'TH N89°22'5"W53.80'TH
#5 S18°39'55"W140.75'TH S89°55'5"	#6 E511.90'TH N00°23'15"W563.35'

(number)(sfx) (dir) (street name) (type)
Property Address: 008513

Land Value		Improvement Value		Sta	Exemption					
Acres	Lots	Cd	Assessed	Market	Cd	Assessed	Market	tus	Reg	Dbl
Tx 360		A2	655	5471		1200	10000	H	1000	
Un										
Taxing Jurisdictions										Perm. Exempt:
Schl	City	County	Misc. Codes	Mtg Co	Sale	Last Chgd	Value	Last Chgd		
02R		0019		Code	Yr Num	02/07/94	By	02/07/94	By	
						NANCY		NANCY		

Prop# 16 0929 00 0027 100 - 000 00

READY TO UPDATE MASTER RECORD

Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Appr 8-Value Brkout 9-More Legal
10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

" E "

Print Key Output
 5738SS1 V2R3M0 931217 51041796 12/09/94 Page 1
 10:55:02
 Display Device : W4
 User : VIRGINIA

Owner Id: 013535 Book: 005
FUGATE KENNETH O [8305 EAST 7TH
 TULSA OK 74112

Property Description
 #1 SE SW LESS 1 AC W OF R.R & 10 AC #2 STRIP E SIDE SE SW & LESS 1 1/2 AC
 #3 TO OLIVE & SHELTON PT NE SW & NW #4 SE LYING E FRISCO RY 20-16-9
 #5 #6

(number)(sfx)(dir) (street name) (type)
 Property Address: M08049

Acres		Lots		Land Value		Improvement Value		Sta	Exemption			
Tx	Un			Cd	Assessed	Market	Cd	Assessed	Market	tus	Reg	Dbl
6768				A1	590	4900						
										U		
										Perm. Exempt:		
Taxing Jurisdictions				Mtg Co		Sale		Last Chgd Value Last Chgd				
Schl	City	County	Misc. Codes	Code	Yr	Num	02/26/92 By		04/10/90 By			
02R		0019					ROBIN		SUSAN			

FF
 R
 Prop# 16 0920 00 0029 100 - 000 00
 READY TO UPDATE MASTER RECORD
 Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Appr 8-Value Brkout 9-More Legal
 10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

" F "

Print Key Output
5738851 V2R3M0 931217
Display Device : W4
User : VIRGINIA

S1041796

Page 1
12/09/94 10:55:41

Owner Id: 060313
FALCON OIL PROPERTIES

[BOX 988
BRISTOW

Book: 002
OK 74010

Property Description
[#1 20-16-9 BEG SW COR OF SW TH S89 #2 D36'2"E 660' TH NOD4'14"W 242.85
#3 TO POB TH CONTINUING NOD4'14"W #4 235.64' TH NOD0'49"W 554.87' TH
#5 N89D36'02"W 526.14' TH N25D32'16 #6 "E 184.1' TH N47D56'57"E 435.30

(number)(sfx) (dir) (street name) (type)
Property Address:

	Acres	Lots	Cd	Land Value Assessed	Market	Cd	Improvement Value Assessed	Market	Sta	Exemption
Tx	325		A2	194	1620				U	
Un										
Taxing Jurisdictions										
Schl	City	County	Misc. Codes		Mtg Co Code	Sale Yr	Num	Last Chgd	Value	Last Chg
02R		0019	LS					04/13/94	By DOREEN	04/13/94 B DOREEN

Prop# 16 0920 00 0024 117 - 000 00

READY TO UPDATE MASTER RECORD

Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Apr 8-Value Brkout 9-More Legal
10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

" G "

Print Key Output
5738SS1 V2R3MO 931217
Display Device : W4
User : VIRGINIA

51041796

Page 1
12/09/94 10:56:23

Owner Id: 035588

Book: 006

→ SHELTON BETTY LAYE
1423 NORTH BOSTON PLACE

%JESSIE OLIVER
TULSA

OK 741064613

Property Description
[#1 BEG 310' W OF SW COR SE SW N946 #2 1/2 W535' S946 1/2 E535 TO BEG
#3 S 1/2 ABOVE 20-16-9 #4
#5 BK 523 PG 464 #6

(number)(sfx) (dir) (street name) (type)
Property Address: NUB051

	Acres	Lots	Cd	Land Value Assessed	Market	Cd	Improvement Assessed	Value	Sta	Exemption
Tx	570		A2	790	6563	A2	325	2710	I	
Un										
Taxing Jurisdictions										Perm. Exempt:
Schl	City	County	Misc. Codes	Mtg Co	Code	Yr	Sale	Last Chgd	Value	Last Chgd
02R		0019						09/13/93 By		03/01/89 By
								DEBBIE		MARY

FF
R

Prop# 16 0920 00 0030 100 - 000 00

READY TO UPDATE MASTER RECORD

Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Apr 8-Value Brkout 9-More Legal
10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

" H "

Print Key Output
 5738SS1 V2R3M0 931217 S1041796 12/09/94 Page 1
 10:56:40
 Display Device : W4
 User : VIRGINIA

Owner Id: 062163 Book: 006
BRISTOW FIRST ASSEMBLY OF GOD [ROUTE 3 BOX 1
 BRISTOW OK 74010

Property Description
 [#1 20-16-9 TR BEG SW COR TH S89D35 #2 '48"E660'TH N74D12'47"W174.63'TH
 #3 N66D48'11"W299.01'TH N70D09'35"W #4 230.85'TH S00D3'31"E239.04'TO PC
 #5 B 1.75AC M/L BK 314 PG 1491 #6

(number)(sfx) (dir) (street name) (type)
 Property Address:

Acres		Lots		Land Value		Improvement Value		Sta	Exemption	
Assessed	Market	Cd	Assessed	Market	Cd	Assessed	Market	tus	Reg	Dbi
Tx 175								N		
Un								Perm. Exempt:		
Taxing Jurisdictions				Mtg Co		Sale		Last Chgd Value Last Chgd		
Schl	City	County	Misc. Codes	Code	Yr	Num	11/23/93 By	11/23/93 By		
02R		0019	LS				DOREEN	DOREEN		

Prop# 16 0920 00 0024 109 - 000 00

READY TO UPDATE MASTER RECORD

Cmd Keys: 1-Impr Appr 2-Res Lnd Appr 3-Agr Lnd Appr 8-Value Brkout 9-More Legal
 10-Mobile Home 14-Addr Chg 19-Log Del 21-Restore 22-Abort

h I u

39825

GENERAL WARRANTY DEED NO. 371

Know All Men by These Presents, That I, the undersigned, do hereby certify that the following is a true and correct copy of the original as the same appears in the records of the County of Tulsa, State of Oklahoma, to-wit:

THIS INSTRUMENT, made this 11th day of October, A. D. 1928, between
A. A. Rolleston, by his attorney in fact, Edwin H. Rolleston, of Bristow,
 of Creek County, in the State of Oklahoma, of the first part, and
H. E. Wilcox, Oil & Gas Company of the second part,

WITNESSETH, That said party of the first part, in consideration of the sum of
One Dollar (\$1.00) and other good and valuable considerations
 said party of the first part,
 the receipt whereof is hereby acknowledged, do hereby certify that said party of the second part,
H. E. Wilcox heirs and assigns, all of the following described Real Estate, situated in the County of Creek, State of Oklahoma, to-wit:

Beginning at a point at the east intersection of the St. Louis and San Francisco Railroad right of way with the north line of section twenty-nine (29), township sixteen (16), North, Range Nine (9) East, thence east along the north line of said section line 400 feet, thence in a southerly direction at right angles with said section line 365 feet, thence in a westerly direction parallel with said section line 260 feet, thence in a southerly direction at right angles with said section line 348 feet, thence in a westerly direction parallel with said section line 707 feet to the east line of the St. Louis and San Francisco Railroad right of way, thence in a northeasterly direction along the east line of the St. Louis and San Francisco Railroad right of way 891 feet to the place of beginning and containing ten (10) acres, more or less.

TO HAVE AND TO HOLD THE SAME, Together with all and singular the tenements, hereditaments and appurtenances thereto in anywise appertaining forever.

And said A. A. Rolleston, by his attorney in fact Edwin H. Rolleston, his

heirs, executors or administrators, do hereby covenant, promise and agree to and with said party of the second part, that

of the second part that at the delivery of these presents, he is lawfully seized in his own right of an estate and undisturbed estate of inheritance in fee simple, of and to all and singular the above described premises, with the appurtenances; that the same are free, clear and discharged and unincumbered of and from all former and other grants, titles, charges, claims, judgments, taxes, assessments and incumbrances of whatever nature and kind; EXCEPT

and that he with warrant and forever defend the same unto said party of the second part, its heirs and assigns, against

said party of the first part, his heirs and assigns, and all and every person or persons whomsoever, lawfully claiming or to claim the same.

IN WITNESS WHEREOF, the said party of the first part, he hereunto set his hand and seal the day and year first above written.

WITNESSETH:
ALVIN L. CHAPMAN A. A. Rolleston
BORRIS B. CLAY By Edwin H. Rolleston
his attorney in fact

STATE OF OKLAHOMA, County of Tulsa

Before me, Kate Dickson, a Notary Public, do hereby certify that on this 12th day of

October, A. D. 1928, personally appeared Edwin H. Rolleston

and as attorney in fact of A. A. Rolleston, to me known to be the identical person whose name and address are set forth in the foregoing instrument, and he acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth.

Witness my hand and seal the day and year above written.

My commission expires January 8, 1931 (Notary SEAL) Kate Dickson Notary Public

STATE OF OKLAHOMA, County of Creek, ss. Tulsa Co. Edwin H. Rolleston

This instrument was filed in my office for record on Oct. 25, A. D. 1928, at 8 o'clock A. M.

and duly recorded in Book 371 on page 188.

(SEAL) Erna Morris County Clerk.

By Francesa Delman Deputy.

KM10000096

434

63 7321

Quit-Claim Deed

(CORPORATION FORM)

STATE OF OKLAHOMA
COUNTY OF CREEK

NOV 4 1963

THIS INDENTURE, Made this 1st day of November, 1963

between Wilcox Oil Company

a corporation, organized under the laws of the State of Delaware

of the County of Tulsa State of Oklahoma, Party of the first part

and Wendell H. Sandlin

Party of the second part

WITNESSETH: That said party of the first part, in consideration of the sum of

Ten and No/100 Dollars (\$10.00) and O.V.G.

to them duly paid, receipt of which is hereby acknowledged, do hereby quit-claim, grant, bargain, sell and convey unto the said party of the second part, and to his heirs and assigns forever, all their right, title, interest and estate, both at law and in equity, of in and to the following described estate, situate in the County of Creek and State of Oklahoma, to-wit:

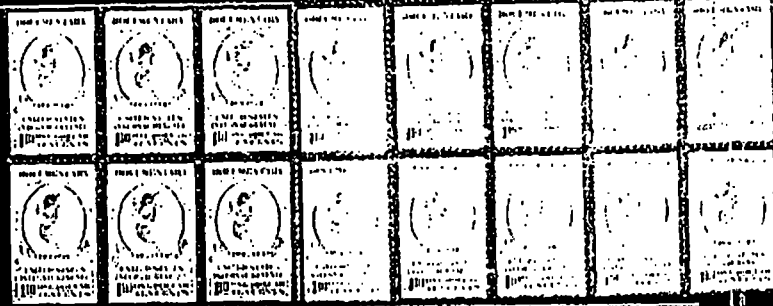
110.03 acres of land, more or less, more particularly described by Tracts as follows:

FIRST TRACT: The Northwest Quarter of the Northeast Quarter (NW/4 NE/4) Section 29-16N-9E, containing 40 acres, more or less.

SECOND TRACT: The Northeast Quarter of the Northwest Quarter (NE/4 NW/4) Section 29-16N-9E, less and except a tract of land containing 1.14 acres more particularly described by metes and bounds as follows: Commencing at the Northwest corner of NE/4 NW/4, thence East 25 feet, thence South, a distance of 33 feet to the point of beginning; thence East 200 feet; thence South 250 feet; thence West 200 feet; thence North 250 feet to the point of beginning, containing 38.85 acres more or less.

THIRD TRACT: A Tract of land containing 24.22 acres, more or less, situate in the Northwest Quarter of the Northwest Quarter (NW/4 NW/4) Section 29-16N-9E, more particularly described by metes and bounds as follows: Commencing at the Northeast corner of the NW/4 NE/4 Section 29, thence West 516 feet to the East line of the St. Louis & San Francisco Railroad right of way, thence Southeast along said East line of said Right of Way to the point of intersection of said East line of said St. Louis & San Francisco Railway right of way with the center line of Sand Creek; thence meandering southeasterly with the center of said Sand Creek to the South line of the NW/4 NE/4 of said Section 29-16N-9E; thence East along the South line of the NW/4 NE/4 of said Section 29 to the Southeast corner of the NW/4 NW/4 of said Section 29; thence North along the East line of NW/4 NW/4 said Section 29 a distance of 1320 feet to the point of beginning, subject to Railroad Right of Way Easements and deeds of record.

FOURTH TRACT: That part of the Northwest Quarter of the Northwest Quarter (NW/4 NW/4) Section 29-16N-9E, lying North and West of the St. Louis & San Francisco Railway Right of Way, subject to Railroad Right of Way Easements and deeds of record, containing Seven (7) acres, more or less.



Together with all and singular the hereditaments and appurtenances thereunto belonging. To have and to hold the above granted premises unto the said party. of the second part. his heirs and assigns forever.

IN WITNESS WHEREOF, The said party of the first part has hereunto set its hand and caused its Corporate Seal to be affixed the day and year first above written.

By Shelton A. Smith WILCOX OIL COMPANY
Secretary President

STATE OF OKLAHOMA. CORPORATION ACKNOWLEDGMENT.
County of Tulsa U.S.

Before me, the undersigned, a Notary Public, in and for said County and State, on this 1st day of November 1963, personally appeared A. L. Chapman

known to me to be the identical person who subscribed the name of the signer thereof to the foregoing instrument as its President and acknowledged to me that he executed the same as his free and voluntary act and deed and to the true and voluntary act and deed of such corporation, for the uses and purposes therein set forth.

Given under my hand and seal the day and year first above written.
My commission expires Dec 29, 1966 Shelton A. Smith
Notary Public

K

**Site Assessment Report
for
Wilcox Refinery
Bristow, Creek County,
Oklahoma**

Contract No. 68-W6-0013

March 1999

Prepared for:

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 Ross Avenue
Dallas, Texas 75202**



ecology and environment, inc.

International Specialists in the Environment

1999 Bryan Street, Dallas, Texas 75201

Tel: (214) 245-1000, Fax: (214) 245-1001

recycled paper



ecology and environment, inc.

International Specialists in the Environment

1999 Bryan Street
Dallas, Texas 75201

Tel: (214) 245-1000, Fax: (214) 245-1001

MEMORANDUM

Date: March 30, 1999

To: Don Smith, Task Manager
EPA Region 6 Response and Prevention Branch

Thru: Henry Thompson, Jr., Project Officer
EPA Region 6 Program Management Branch

Thru: Chris Quina, STL
EPA Region 6 Superfund Technical Assessment and Response Team

From: Thomas Beer, Project Manager
EPA Region 6 Superfund Technical Assessment and Response Team

Subj: Site Assessment Report: Wilcox Refinery
Bristow, Creek County, Oklahoma
CERCLIS No. OKD001010917
TDD#: S06-98-03-0009
PAN: 052601SFXX
Lat: 35°50'30"N Long: 96°23'00"W

Enclosed is the site assessment report for the Wilcox Refinery site in Bristow, Creek County, Oklahoma. The report provides background information, and a detailed discussion of the sampling history and results for this site. The most significant findings are summarized in Section 6.

14:000608_KJ06_04_00_00-DT1221
SAR_CV\MEMO-030009-RA
03/30/99
00 10:00:00 AM

1-enclosed paper

*ecology and environment
international specialists in the environment*

KMI0000102

Table of Contents

<u>Section</u>	<u>Page</u>
1 Introduction	1-1
2 Background Information	2-1
2.1 Site Location and Setting	2-1
2.2 Regional Geology and Hydrogeology	2-1
2.2.1 Geology	2-1
2.2.2 Hydrogeology	2-2
2.3 Site Description and History	2-2
2.3.1 Site Description	2-2
2.3.2 Site History	2-4
2.4 Previous Investigations	2-5
2.5 Hazards/Incidents of Concern	2-5
3 Actions Taken	3-1
3.1 Source Evaluation and Sample Locations	3-1
3.2 Soil Coring/Sampling	3-2
3.3 Ground Water Sampling	3-2
3.4 Surface Water Sampling	3-3
3.5 Sediment Sampling	3-3
3.6 HAZCAT Testing	3-3
3.7 Global Positioning System and Total Station Survey	3-4
4 Nature and Extent of Spill Impact	4-1
4.1 Soil Analytical Results	4-1
4.1.1 Organics	4-2
4.1.2 Inorganics	4-2
4.2 Ground Water Analytical Results	4-3
4.2.1 Benzene, Toluene, Ethylbenzene, and Xylenes	4-3
4.2.2 Total Petroleum Hydrocarbons	4-3
4.3 Surface Water Analytical Results	4-4
4.4 Sediment Analytical Results	4-4
4.4.1 Organics	4-4
4.4.2 Inorganics	4-5
4.5 HAZCAT Result	4-5
4.6 Data Quality Assessment	4-6
4.6.1 Precision	4-6
4.6.2 Accuracy	4-7

Table of Contents (Cont.)

<u>Section</u>	<u>Page</u>
4.6.3 Representativeness	4-7
4.6.4 Comparability	4-7
4.6.5 Completeness	4-8
4.7 Waste Quantity	4-8
5 ARARs and TBCs	5-1
5.1 Regulatory Criteria	5-2
5.1.1 Oily Waste and Surface Soil	5-3
5.1.2 Subsurface Soil	5-4
5.1.3 Ground Water	5-5
5.2 Contaminants of Concern	5-5
6 Findings	6-1
7 References	7-1

Appendices

A Soil Boring Logs	A-1
B Records of Communication (6 pages)	B-1
C Sampling QA/QC Work Plan	C-1
D Health and Safety Plan	D-1
E Copy of Logbooks (56 pages)	E-1
F Photographs	F-1
G Access Agreements	G-1
H Sample Location Descriptions and Rationale	H-1
I Laboratory Analytical Results	I-1
J Data Validation Reports	J-1
K POLREPs (15 pages)	K-1
L Copy of TDD #S06-98-03-0009 and Amendments A through E	L-1

List of Tables

<u>Table</u>	<u>Page</u>
2-1 Land Ownership History	2-7
2-2 Summary of Expanded Site Inspection Analytical Results	2-8
3-1 Summary of the Number of Samples Collected	3-5
3-2 Summary of the Analytical Program	3-6
3-3 Soil Boring Parameters	3-7
4-1 Organic Analytical Results in Sediment and Soil	4-10
4-2 Inorganic Analytical Results in Sediment and Soil	4-18
4-3 Organic Analytical Results in Ground Water	4-23
4-4 Summary of Data Completeness	4-24
4-5 Source Inventory and Preliminary Estimates of Waste Quantity	4-25
5-1 Example Regulatory Criteria. To Be Considered Materials, Organics	5-6
5-2 Example Regulatory Criteria. To Be Considered Materials, Inorganics	5-9

List of Illustrations

<u>Figure</u>	<u>Page</u>
1-1 Site Location Map	1-3
2-1 Site Plan	2-9
2-2 Regional Hydrogeology	2-10
2-3 Potential Waste Sources and Surface Drainage Features	2-11
3-1 Soil Boring and Sediment Sample Locations	3-8
3-2 Depth to Bedrock in Soil Borings	3-9
3-3 Water Sample Locations	3-10
4-1 Elevated Organics in Sediment and Soil	4-28
4-2 Elevated Inorganics in Sediment and Soil	4-29
4-3 BTEX and TPH in Ground Water	4-30

Pursuant to Contract No. 68-W6-0013, the U.S. Environmental Protection Agency (EPA) tasked Ecology and Environment, Inc., (E & E), the Region 6 Superfund Technical Assessment and Response Team (START) contractor, to perform a Site Assessment (SA) at the Wilcox Oil Company (Wilcox) refinery site (EPA Identification No. OKD0010917) located in Bristow, Creek County, Oklahoma. The site assessment follows a Preliminary Assessment (PA) conducted by the Oklahoma Department of Environmental Quality (ODEQ) in December 1994 (ODEQ 1994a), and an Expanded Site Inspection (ESI) performed by Roy F. Weston, Inc., for ODEQ in March 1997 (Weston 1997).

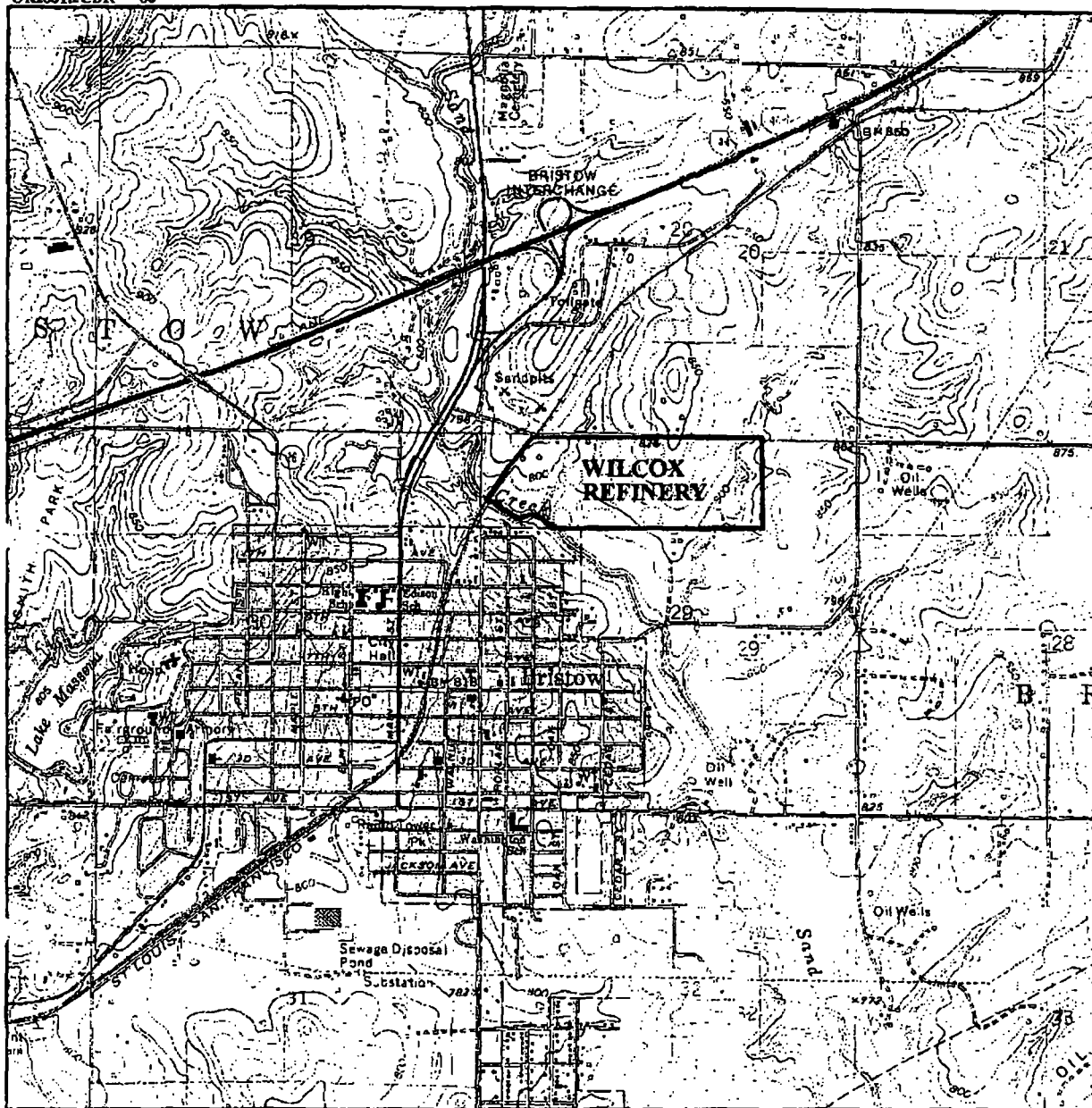
The Wilcox refinery site includes approximately 98 acres of an abandoned and demolished oil refinery and an associated tank farm area. The site is located on the northeastern outskirts of Bristow, near Interstate Highway 44 and approximately 35 miles southwest of Tulsa, Oklahoma. A site location map derived from the U.S. Geological Survey (USGS) Bristow and Slick quadrangles of the 7.5-minute topographic map series is presented in Figure 1-1. The Wilcox site is located approximately 0.2 mile east of State Highway 66, to the east of the Saint Louis and San Francisco (SL&SF) railroad tracks, and south of an unnamed section line road, variously referred to as Refinery Road or Wilcox Road. The geographic coordinates at the northwest corner of the site are approximately 35°50'30" north latitude and 96°23'00" west longitude.

START was tasked to identify the area and extent of contamination by performing a site investigation. START was specifically charged to:

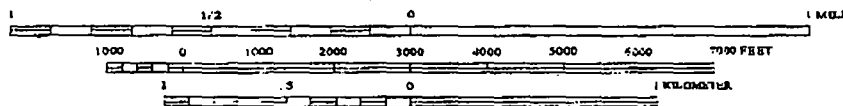
- Conduct an oil spill response;
- Coordinate with federal, state, and local officials;
- Document the area and extent of spill impact;

- Identify and document cause/probable cause;
- Provide maps, sketches, and photographic documentation;
- Prepare a waste assessment (HAZCAT);
- Conduct a SA for potential removal action under the National Contingency Plan (NCP) and Oil Pollution Act (OPA) of 1990; and
- Determine threat to navigable waters of the United States.

To meet the objectives of this program, E & E performed two phases of field work: April 27, April 28, and June 1 to June 4, 1998; and from August 3 to August 6, 1998. The first phase of field work was postponed from April to June after the collection of two soil and two sediment samples, due to saturated ground conditions at the site after heavy overnight rains. Field activities included the collection of subsurface soil, ground water, surface water, and sediment samples. The samples were submitted for laboratory analysis to determine the presence of benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, polycyclic aromatic hydrocarbons (PAHs), total petroleum hydrocarbons (TPH), metals, and hydrogen ion concentration (pH). Analytical results were used to determine the presence of, and assess the threat to navigable waters from, potential site related contaminants.



SCALE 1:24,000



CONTOUR INTERVAL 10 FEET



QUADRANGLE LOCATION

ECOLOGY AND ENVIRONMENT, INC.
Superfund Technical Assessment
& Response Team - Region 6

CERCLIS/CASE#: OKD001010917 TDD#: S06-9803-0009

SOURCE: U.S.G.S. 7.5 MIN. TOPOGRAPHIC QUADRANGLES
BRISTOW AND SLICK, OKLAHOMA

**FIGURE 1-1 SITE LOCATION MAP
WILCOX REFINERY
BRISTOW, OKLAHOMA**

2

Background Information

2.1 Site Location and Setting

This section summarizes existing information for the project site. The Wilcox refinery site is located northeast of the City of Bristow, Creek County, Oklahoma (Figure 1-1). The site covers approximately 98 acres and is the location of a former oil refinery and tank farm. Refining began at the site during the 1920s and ended in the 1960s, when the site was abandoned and most steel structures were salvaged and removed. The site is also bordered to the northwest and west by former refinery sites. The Wilcox site includes remnants of the refinery buildings, backfilled pits and ponds, and a number of circular berms that surrounded former large aboveground storage tanks. A site plan showing the layout of the site is presented as Figure 2-1.

2.2 Regional Geology and Hydrogeology

2.2.1 Geology

Based on the soil survey for Creek County, the site contains several soil series: the Stephenville and Darnell fine sandy loams, sloping and gently sloping; the Verdigris silt loam; and Oil-waste land (USDA 1959). The Stephenville and Darnell fine sandy loams cover the majority of the site. These soils consist of shallow to moderately deep upland soils developed over reddish-yellow to red sandstone or interbedded sandstone and sandy shale. Runoff is slow to moderate, but internal drainage is moderate to rapid. The site-specific soils characterized in this investigation are presented in the soil boring logs (Appendix A).

The Verdigris silt loam is located in the southwestern portion of the site, along Sand Creek. These soils occupy the flood plains of streams and are moderately well drained; however, they are flooded occasionally to frequently. Parent material consists of slightly acid to weakly alkaline alluvial sediments washed from soils of the prairies.

The Oil-waste land was mapped in discrete areas throughout the site in 1959. These soils are in the tank farm and former refinery equipment areas. The areas mapped in this miscellaneous land type have been practically ruined for agricultural use by oil and salt-water waste from oil wells and production facilities. They are generally gullied and eroded and were barren of vegetation. They ranged in size from 1 acre to several acres (USDA 1959).

2.2.2 Hydrogeology

The Barnsdall Formation is approximately 200 feet thick at the Wilcox site and consists of massive to thin beds of coarse to fine grain sandstone, irregularly interbedded with sandy to silty shale (USGS 1977). Sandstone outcrops of the Barnsdall Formation are common throughout the site, and potentially receive groundwater recharge from downward infiltration of direct precipitation at the surface, as well as infiltration from shallow, perched ground water zones. The Barnsdall Formation is a bedrock aquifer but is not considered to be a Principal Ground Water Resource by the Oklahoma State Department of Health (OSDH) (ODEQ 1994a). However, the site is in close proximity to the Vamoosa-Ada aquifer, an important central Oklahoma regional drinking water aquifer, located west of the site. The site is within the potential recharge area for the Vamoosa-Ada aquifer, as shown in Figure 2-2 (OSDH 1983).

The upper part of the Barnsdall Formation and the Sand Creek alluvial aquifer are unconfined, with a shallow water table. The site is in a potential recharge area and thus is susceptible to ground water contamination from petroleum waste or contaminated soils. Depths to seasonal perched water zones are less than 10 feet and the shallowest regional water bearing formation is reportedly less than 25 feet below ground surface (bgs) (ODEQ 1994a). However, a depth of 45 to 60 feet was reported for the first water saturated sandstone in a nearby former domestic water well (White 1998). In summary, the possible ground water contamination mechanisms occurring at the site are 1) recharge to the shallow part of the Barnsdall Formation on site, 2) low potential recharge to the Vamoosa-Ada aquifer west of the site, and 3) discharge of perched ground water to the alluvial aquifer along Sand Creek to the south.

2.3 Site Description and History

2.3.1 Site Description

The Wilcox site includes remnants of an inactive oil refinery and associated tank farm. According to ODEQ personnel, the site boundaries have been revised from those defined in the 1994 PA to include only those areas in which Wilcox Oil Company conducted operations. Although Wilcox Oil Company owned property west of the railroad tracks (currently occupied

by the First Assembly of God Church and pastor's residence), the facility only operated on the lands east of the SL&SF tracks. Other refineries operated on the west side of the railroad tracks (Lorraine Refinery) and north of Refinery Road (Ohio Oil). The current project site covers approximately 98 acres and includes the northern portion of Section 29, Township 16 North, Range 9 East (Indian Meridian) (ODEQ 1994b). The site can be divided into two former operational areas, the refinery area, and the tank farm, with four current property owners, as described below.

The former refinery area, currently owned by Jack White and his son Arthur, is fenced and covers approximately 18 acres at the west end of the project site (ODEQ 1994b). This area is bounded to the south by Sand Creek, to the east by an intermittent tributary to Sand Creek (Tributary 1), by the SL&SF railroad tracks to the west, and by Refinery Road to the north (Figure 2-1). Most of the refinery structures and tanks have been salvaged and removed or are in ruins. Four empty aboveground storage tanks (less than 150,000 gallons capacity each) remain standing on the refinery portion of the property, in addition to a substantial number of abandoned structures, rusted equipment, and partially buried pipelines. The ESI identified a number of potential waste source areas, and provided a basis for further subsurface investigation. These potential waste source areas are depicted in Figure 2-3, along with observed surface drainage pathways from sources toward stream channels. The bare, unvegetated area located in the south-central portion of the refinery area is a former pond, apparently backfilled with solid refinery process waste. This material was subject to HAZCAT testing, as described in Section 3.6. A former refinery office building in the northern part of the refinery has been converted to a residence. An intermittent creek (Tributary 1) flows southward along the eastern edge of the refinery area through a small dam in the southeast corner of the refinery area (Lee's Pond) and into Sand Creek.

The former tank farm, currently mostly owned by Mr. Phil Elias, covers approximately 80 acres and contains waste pits, ponds, and a number of circular berm areas that surrounded former large ASTs (Figure 2-3). All of the tanks have been cut down and removed for salvage; however, visible remnants of the metal tank bottoms and tank bottom sludge (TBS) remain. Many of the berms surrounding the pits, ponds, and former tanks have recently been cut or leveled to prevent ponding and, in some cases, to release liquid tarry waste from the impoundments. An intermittent creek (Tributary 2) is located in the eastern portion of the tank farm and flows south to Sand Creek (Figure 2-3).

Mr. Olen Lee owns 3.6 acres of land in the west central portion of the site, including a stock watering pond on Tributary 1 (Lee's Pond). Three people, Mr. and Mrs. Lee and their daughter, live at the Lee residence. The Lee's raise chickens, rabbits, and cattle on their property. Based on aerial photographs, the Lee residence appears to be on top of a former refinery surface impoundment. Aerial photos also indicate that their property includes portions of a former large aboveground storage tank berm area to the north of their house, in addition to a second surface impoundment to the south of the house (Figure 2-3).

A 1.15-acre, fenced, former pipeline pumping station that is currently owned by Sun Oil Company exists in the north-central portion of the site (Figure 2-3). An active Williams Company petroleum pipeline extends from southeast to northwest across the middle of the site and through the Sun Oil property, on a leased right-of-way (ROW). The pipeline ROW apparently dates from the time of purchase by Wilcox Oil Company in 1929 (Table 1; Figure 2-3).

2.3.2 Site History

Wilcox Oil Company operated as a crude oil refinery from the 1920s until the property was sold in November 1963 (ODEQ 1994b). According to a 1930 article published in *The Refiner and Natural Gasoline Manufacturer*, the Wilcox Oil Company refinery was operated as a pilot project from about 1920 to 1928, with a capacity of 1,000 barrels of oil per day, by Riley Petroleum Company (Reid 1930, cited by ODEQ 1994b). Wilcox Oil Company acquired the original 10-acre refinery property (NE¼, NW¼, NW¼ of Section 29) in 1928 from A.A. Rollestone (ODEQ 1994b). A modernized skimming and cracking plant was constructed in 1929. The upgraded facility had an operating capacity of 4,000 barrels of crude oil per day. The main components of the system consisted of a skimming plant, cracking unit, and redistillation battery with a vapor recovery system and continuous treating equipment. The crude oil was brought directly from the nearby oil fields, eliminating some storage and handling facilities, but resulting in crude with high bottom sediment and water content (ODEQ 1994a).

At some unknown later date, the Wilcox Oil Company expanded operations by acquiring the former Lorraine refinery facility located west of the SL&SF railroad, and the tank farm area to the east of the refinery. The company sold the original site plus the expanded areas, totaling approximately 110 acres, to Wendel Sandlin on November 1, 1963. Most of the equipment and storage tanks that remained on site in 1963 were auctioned and have since been salvaged for scrap iron by private landowners and opportunistic salvagers. The Wilcox Oil Company no longer operates in Oklahoma, and, based on information acquired from the Oklahoma Secretary

of State's Office, the company merged with Tenneco Oil Company in 1967. According to file information, Jack White acquired the original refinery property from J.M. and Kinis Bankston on March 27, 1973 (ODEQ 1994b). Mr. Elias acquired the bulk of the current Wilcox site from Bill Bethel in 1993 (Appendix B). A summary of current site owners and historical property transfers is presented in Table 2-1.

2.4 Previous Investigations

The EPA completed a Potential Hazardous Waste Site Identification form on June 7, 1994. In response, the ODEQ completed a PA for the Wilcox site and adjacent refinery and tank farm sites, on December 15, 1994. The PA indicated that contamination of soil and ground water at the site had been observed and that potential receptors exist for these pathways (ODEQ 1994a). The PA then recommended a site inspection be conducted in order to better characterize the site and to determine whether threats to human health and the environment exist. The ESI was conducted by Roy F. Weston (Weston) for ODEQ in November 1996, and their results were presented in the ESI report dated March 1997.

The ESI revealed the presence of numerous backfilled ponds and oily waste pits, 11 large tank bottom areas, assorted waste disposal areas, and other potential contaminant sources (Figure 2-3). Many of the tank bottom areas contained a thin layer of oily, tarry, black asphalt-like material generally referred to as tank bottom sludge (TBS). Former containment features of the impoundments and tank bottom areas were cut or leveled after site closure, thus facilitating surface migration of source contaminants. Based on surface soil, stream sediment, and oily waste sampling results from the ESI, the contaminants of concern at the site are total petroleum hydrocarbons (TPH), benzene, selected polycyclic aromatic hydrocarbons (PAHs), and selected metals. A summary of the ESI analytical results is presented in Table 2-2.

E & E conducted a site discovery survey under OPA in June 1997, and two site reconnaissance visits were performed by START in March and April 1998. During its site visits, START observed that the site owners had filled in Pond 1 and the 'oily waste' pit with site soil. The berm surrounding Pond 2 was breached and the pond drained toward Sand Creek. Four ASTs still remain on the White's property at the west end of the site. Of these ASTs, two are empty, and two contain thin layers of watery, oily sludge.

2.5 Hazards/Incidents of Concern

The presence of hazardous substances at the site is a concern. There are possible concerns associated with the sources at the site and the migration of, or exposure to, site-

attributable hazardous substances through the ground water, surface water, soil exposure, and air pathways. The site overlies a shallow unconfined aquifer that private residents north of the site use as a water source. In addition, the site overlies a potential recharge zone to the Vamoosa-Ada aquifer, a public water supply source. A release to surface water is of concern because of the proximity to surface water bodies and the lack of containment structures around potential waste sources. Wetland frontages occur in the downstream segments of Sand Creek, and further downstream in the Little Deep Fork Creek (Weston 1997). Areas of known surface soil and suspected subsurface soil contamination are located near and beneath on-site residences. However, on-site sources occur within fenced sections of private properties and the nearby population is relatively small. A release to the air to the nearby population is of some concern because of the known surface soil contamination at the site.

Table 2-1			
LAND OWNERSHIP HISTORY WILCOX REFINERY, BRISTOW, OKLAHOMA			
Address	Acreage (Parcel Location On Site)	Property Owners	Date of Transfer
Route 1, Box 166 Bristow, OK 74010	18 (Western 1/5 th)	Jack and Arthur White	1/22/79 ¹
		Jack White	3/27/73 ¹
		J.M. Bankston	4/21/67 ¹
		V.R. Lee	3/6/67 ¹
		C.W. Stradley	7/15/66 ¹
		Wendel Sandlin	11/1/63 ¹
		Wilcox Oil Company	1/4/29 ¹
		A.A. Rolleston	Unknown
711A South Rowland Box 659 Bristow, OK 74010	78.85 (Eastern 4/5 th)	Phil Elias	1993 ²
		Bill Bethel	1992 ²
Route 3, Box 4 Bristow, OK 74010	3.6 (West Central)	Olen and Melissa Lee	1/95 ³
		Leon S. and Allene Batey	Unknown
907 South Detroit Street Tulsa, OK 74102	1.15 (North West Central)	Sun Pipeline Co. ⁴	Unknown

Key:

1 = Potentially Responsible Party (PRP) Search, Oklahoma Department of Environmental Quality (ODEQ), 12/12/94

2 = Mr. Phil Elias, Personal Communication, 7/17/98

3 = Mr. Olen Lee, Personal Communication, 7/28/98

4 = Mr. Tom Daws, Personal Communication, 7/21/98

Table 2-2				
SUMMARY OF EXPANDED SITE INSPECTION ANALYTICAL RESULTS WILCOX REFINERY, BRISTOW, OKLAHOMA				
Analyte	Maximum Concentration (mg/kg)			
	Oily Waste	Surface Soil	Stream Sediment	Background Soil
Acetone	2.2	48J		ND
Benzene	0.27			ND
Toluene				ND
Ethylbenzene				ND
Xylenes				ND
Benzo(ghi)perylene		0.44		ND
Chrysene		0.69		0.05
2-Methylnaphthalene	1,400			ND
Phenanthrene	520	0.79		0.034
Pyrene	260J	0.56		0.062
Pesticides/PCBs				ND
Total Petroleum Hydrocarbons	875,000	NA	NA	NA
Aluminum	22,100			5,580
Antimony	77			ND (4)
Arsenic	87			1.5
Barium	191			58.2
Beryllium	12			0.28
Copper	100	127	5.5 (upstream)	5.3
Cyanide	2			ND (0.7)
Lead	47,000	55,049J	117J (upstream)	26.3
Magnesium	5,080		6,260 (upstream)	744
Manganese	938			233
Mercury	0.11	0.18		ND (0.07)
Potassium	3,300			961
Selenium	0.84			ND (1)
Silver	2			ND (1)
Vanadium	38.1			11.2
Zinc	160	132	31.7 (upstream)	34.8

Note: Blank spaces indicate analyte was not detected at concentrations greater than three times background soil concentrations.
Shaded results exceed one or more To Be Considered materials in Section 5.1.1.

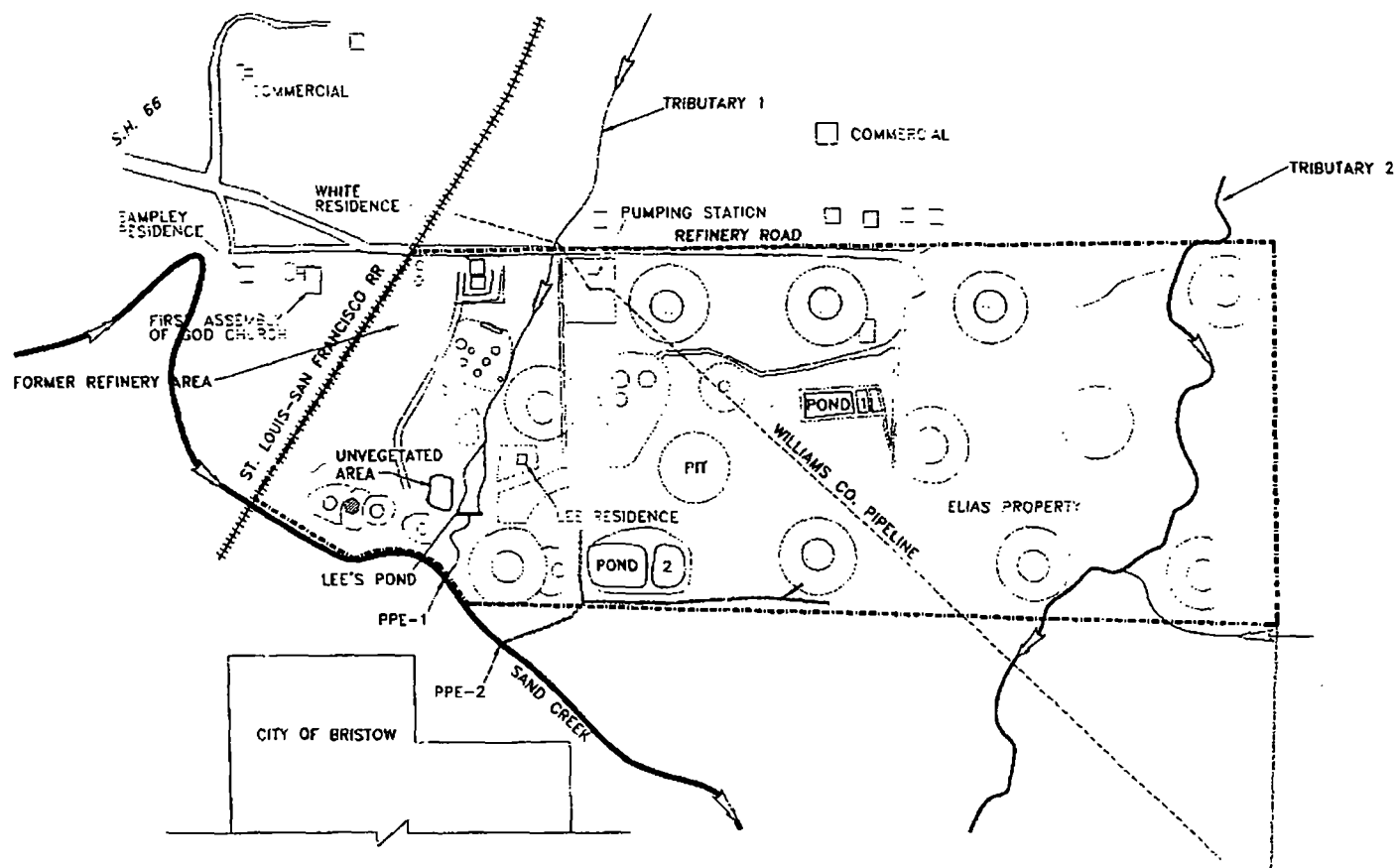
Key:

- ESI - Expanded Site Inspection, Roy F. Weston, Inc., March 1997
- J - Estimated value
- L - Reported concentration is between the instrument detection limit and the CRDL
- NA - Not analyzed
- ND - Not detected
- mg/kg - Milligrams per kilogram

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T2.WPD-3/30/99-RA

ecology and environment
and its impact

KMI0000118



0' 150' 300'
SCALE IN FEET

LEGEND	
FORMER TANK LOCATION	PIPE BOUNDARY
CONTAMINATED SOIL	POND
STORM	DEBRIS DITCH
ADJACENT	EXISTING TANK
	STREAM DIRECTION OF FLOW

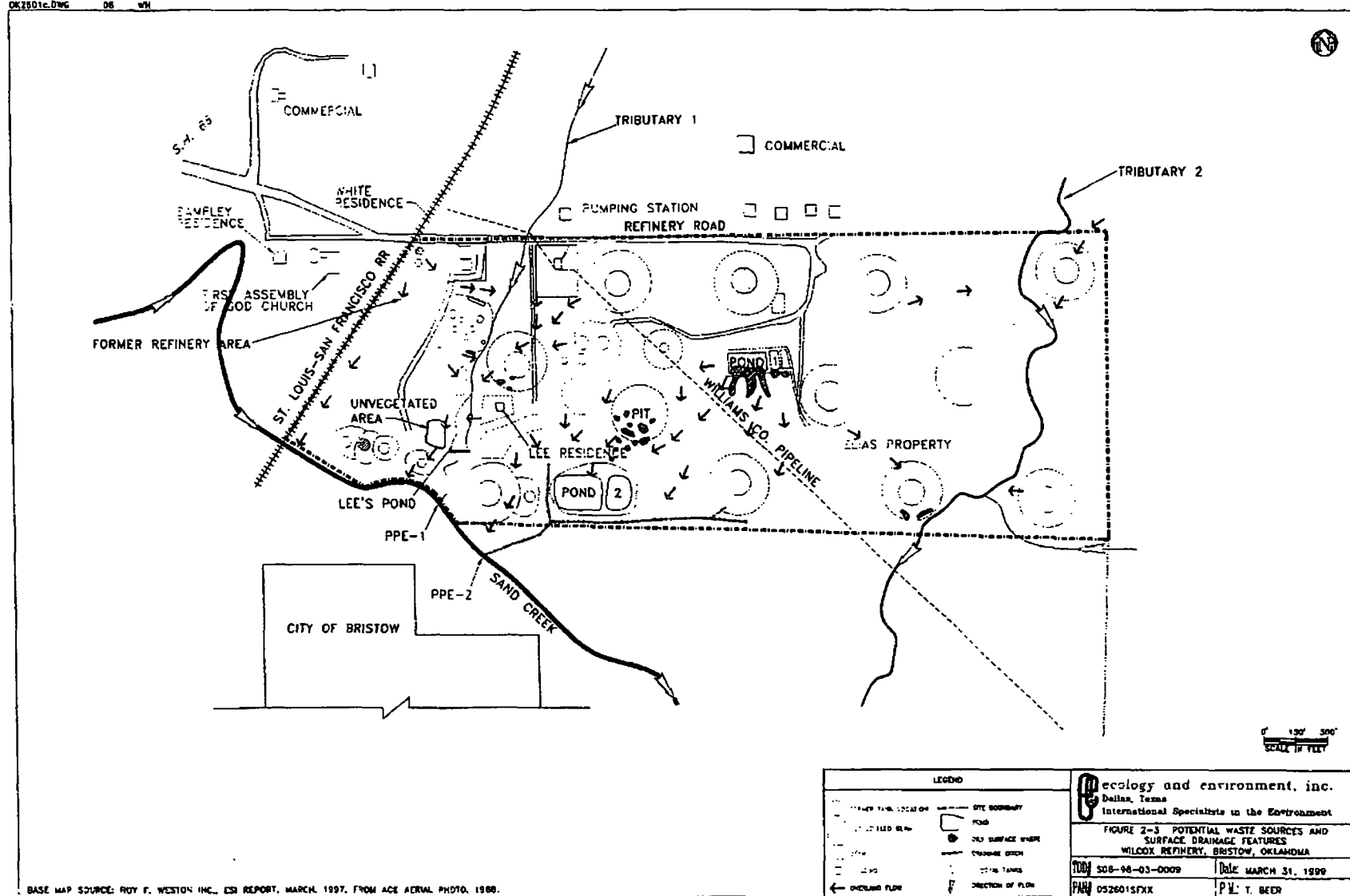
Ecology and environment, inc.
Dallas, Texas
International Specialists in the Environment

FIGURE 2-1 SITE PLAN
WILCOX REFINERY
BRISTOW, OKLAHOMA

NO. 506-98-03-0009 DATE MARCH 31, 1999
PLOT 05280157XX P.M. T. BEER

BASE MAP SOURCE: ROY F. WESTON INC., ESI REPORT, MARCH, 1997, FROM AERIAL PHOTO, 1986.

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This section describes the field activities performed during the SA at Wilcox refinery. Field activities were performed in accordance with the *Sampling QA/QC Work Plans and Health and Safety Plan* developed for the site (E & E 1998a, b, c). Copies of the Phase 1 and 2 Work Plans, and the Health and Safety Plan are presented in Appendices C and D, respectively. Field activities were documented in the field logbook (Appendix E) and with photographs (Appendix F).

3.1 Source Evaluation and Sample Locations

Subsurface soil and ground water samples were taken in order to assess contaminant migration (vertical and horizontal), investigate geologic conditions, and determine the potential threat to navigable waters. Site access was obtained from each landowner prior to field mobilization (Appendix G). Samples collected during the first phase of work were generally collected at downgradient locations in relation to potential source areas identified from the ESI. The second phase of sampling concentrated on assessing the potential impacts to surface waters in Tributaries 1 and 2, from known source areas identified from the ESI and from the first phase sampling results. A summary of the rationale for each sample location is presented in Appendix H.

Soil, ground water, surface water, and sediment samples were collected at the site in order to identify site-related contaminants in environmental media. A total of 55 subsurface soil samples, eight groundwater samples, four surface water samples, two sediment samples, and 12 field quality control (QC) samples were collected. A summary of the number and dates of samples collected for each phase of field work, and for each sampling medium, is presented in Table 3-1. The samples were submitted for laboratory analysis to determine the presence of volatile BTEX compounds, semi-volatile PAHs, TPH, metals, and pH. A summary list of the

analyses performed for each medium sampled is presented in Table 3-2. All first phase samples were shipped via Federal Express to the E & E Laboratory in Buffalo, New York, and the second phase samples were shipped to PDP Analytical Services in Houston, Texas. All analytical results are presented and evaluated in Section 4.

3.2 Soil Coring/Sampling

START used a Geoprobe™ hydraulic push sampler to initiate the first phase of field work in April and June 1998, to explore subsurface lithology, and determine the presence of site-related contaminants. Twenty-eight samples from nineteen 2-inch diameter soil cores were obtained to a maximum depth of 20 feet bgs within potential source areas. Samples were first logged by the field geologist, screened for the presence of volatile organic vapors using an HNu photoionization detector (PID), and transferred by hand from the acetate collection sleeves to the appropriate sample jars. Each borehole was sealed with bentonite pellets after sample collection.

In addition, during the second phase of field work in August 1998, a total of 27 hand-driven, slam-bar borings were advanced to obtain shallow subsurface soil samples and/or perched ground water samples. The location of all soil borings is shown in Figure 3-1. The Geoprobe™ soil cores and hand-driven samples were also used to interpret site-specific lithology, which is presented on boring logs in Appendix A. A summary of soil boring parameters for each location including total depth, depth to water if encountered, depth to bedrock if present, and observations of contamination, is presented in Table 3-3. The areal distribution of the depth to bedrock data is also depicted in Figure 3-2.

Fifty-five soil samples and six duplicates were collected from the subsurface (Table 3-2). The soil samples submitted to the laboratory were analyzed for BTEX compounds using EPA Method 8015B Mod., for PAHs using EPA Method 8310, for TPH using the Texas Natural Resource Conservation Commission (TNRCC) Method 1005, for metals using EPA Method 6010B, and for soil pH using EPA Method 9045C (Table 3-2). Soil sampling results are presented in Section 4.1.

3.3 Ground Water Sampling

Eight ground water samples and one duplicate were collected at the water table where encountered (Table 3-1). All ground water sample locations and the associated soil borings are depicted in Figure 3-3. Samples were obtained where possible from open soil borings using the

stainless steel or acetate soil sampling tubes as bailers. Samples were placed in the appropriate containers, and cooled to 4° Celsius. Ground water samples were submitted for laboratory analysis to determine the presence of BTEX compounds and TPH. Ground water sampling results are presented in Section 4.2.

3.4 Surface Water Sampling

Four surface water samples and one duplicate were collected near the water surface from the upstream (north) and downstream (south) ends of Lee's pond; and from the upstream and downstream ends of Tributary 2 at the property boundaries. All surface water sample locations are depicted in Figure 3-3. Samples were obtained directly in the appropriate containers, at or near the water surface. Samples were cooled to 4° Celsius and submitted to the laboratory for analysis of BTEX compounds and TPH (Table 3-2). Surface water sampling results are presented in Section 4.3.

3.5 Sediment Sampling

Two sediment samples were collected to fill a data gap in the ESI sampling program, and to evaluate the potential for contaminant migration from Pond 2 toward Sand Creek. Sediment samples were collected at the surface from depositional features in the drainage channel, using dedicated stainless steel sampling trowels. The sediment samples submitted to the laboratory were analyzed for BTEX, PAHs, TPH, metals, and pH (Table 3-2). Sediment sampling results are presented in Section 4.4.

3.6 HAZCAT Testing

START performed a series of simple field chemistry tests on one soil sample collected from the unvegetated area on the White's property, in the west central portion of the site. The tests are designed to identify the hazard category (HAZCAT) of unknown samples in the following classifications: solubility/specific gravity, acid/base, oxidizer, flammable, chlorinated hydrocarbon, cyanide, sulfide, and hazard class. The HAZCAT test results are presented in Section 4.5.

3.7 Global Positioning System and Total Station Survey

Geographic coordinates of all soil boring locations were determined by START by using a hand-held Global Positioning System (GPS) instrument operating in autonomous mode, based on the North American Datum-83, with accuracy estimated at +/- 50 feet circular error probable.

The accuracy of the GPS survey is not deemed appropriate for the location of sampling points which are located manually in Section 3 figures to an estimated accuracy of ± 20 feet circular error.

A preliminary land survey was conducted by START on August 8, 1998 using a Sokkia Set-4E Total Intelligent Station surveying instrument. The main purpose of the survey was to determine elevations; and northing and easting locations of the steep embankment area near sampling location SB05 and Tributary 2 relative to a site benchmark established at the SL&SF railroad crossing on Refinery Road. It was anticipated that cross-sectional views of the former tank berm and Tributary 2 stream bank would be required to evaluate the probable migration of hydrocarbon contamination in SB05 toward the stream. However, no contaminants were detected in the second phase soil borings designed to assess the expected subsurface migration pathway, and no further topographical evaluation is required in this vicinity.

Table 3-1			
SUMMARY OF THE NUMBER OF SAMPLES COLLECTED WILCOX REFINERY BRISTOW, OKLAHOMA			
Medium	Depth Range (inches, feet-bgs)	Number of Samples	Date(s) Sampled
Phase 1			
Geoprobe™ Soil	0 to 15 feet	28	4/27 - 6/4/98
Soil Duplicate	0 to 15 feet	3	6/1 - 6/3/98
Ground Water (GW)	2 to 16 feet	5	6/1 - 6/3/98
GW Duplicate	7 to 8 feet	1	6/3/98
Sediment	0 to 3 inches	2	4/28/98
Trip Blank	NA	2	6/2 - 6/3/98
Phase 2			
Slam-bar Soil	0 to 3 feet	16	8/4 - 8/6/98
Soil Duplicate	0 to 3 feet	1	8/6/98
JMC® Boring Soil	2 to 12 feet	11	8/4 - 8/6/98
Soil Duplicate	2 to 12 feet	2	8/5 - 8/6/98
Ground Water	6 to 8 feet	3	8/5 - 8/6/98
Surface Water (SW)	NA	4	8/4 - 8/6/98
SW Duplicate	NA	1	8/5/98
Trip Blank	NA	2	8/4 - 8/6/98
TOTAL		81	

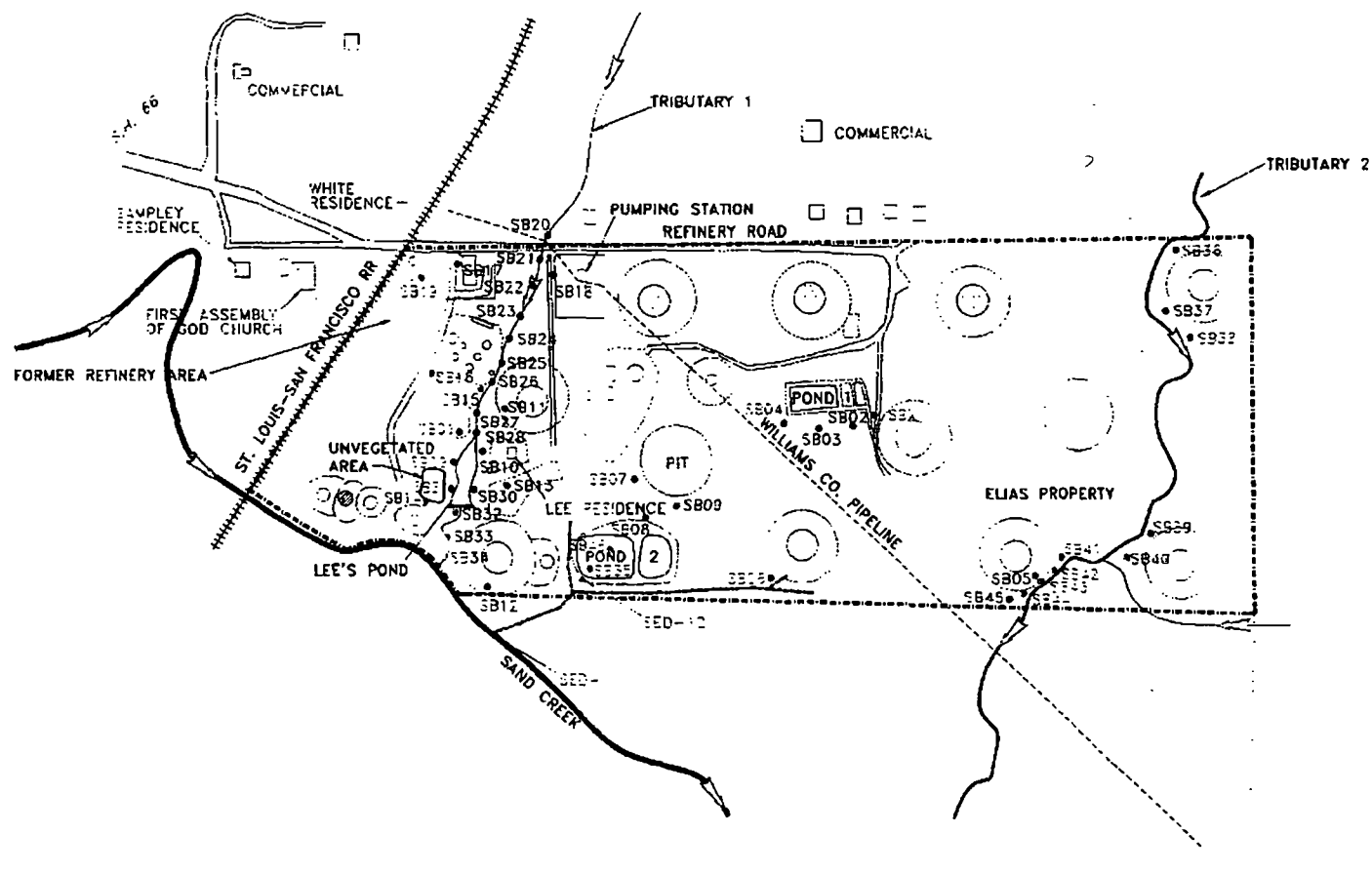
Key:

bgs - below ground surface
NA - Not applicable

Table 3-2						
SUMMARY OF THE ANALYTICAL PROGRAM WILCOX REFINERY, BRISTOW, OKLAHOMA						
Medium	Number of Samples ^(a)	BTEX ^(b) 8021B Mod.	TPH ^(c) 1005	PAHs ^(d) 8310	Metals ^(e) 6010B	pH ^(f) 9045C
Soil	61	X	X	X	X	X
Ground Water	9	X	X*			
Surface Water	5	X	X			
Sediment	2	X	X	X	X	X
Trip Blank	4	X				
TOTAL	81					

Key:

- a - Includes all media, duplicates, and field quality control samples collected
- b - Benzene, toluene, ethylbenzene, and xylenes by GC Method 8021B Modified
- c - Total petroleum hydrocarbons by GC Method 1005 per TNRCC
- d - Polycyclic aromatic hydrocarbons by HPLC Method 8310
- e - 23 metals by ICP Method 6010B
- f - Hydrogen ion concentration expressed in negative log units by Method 9045C
- * - TPH was not analyzed in Sample GW08 due to low sample volume

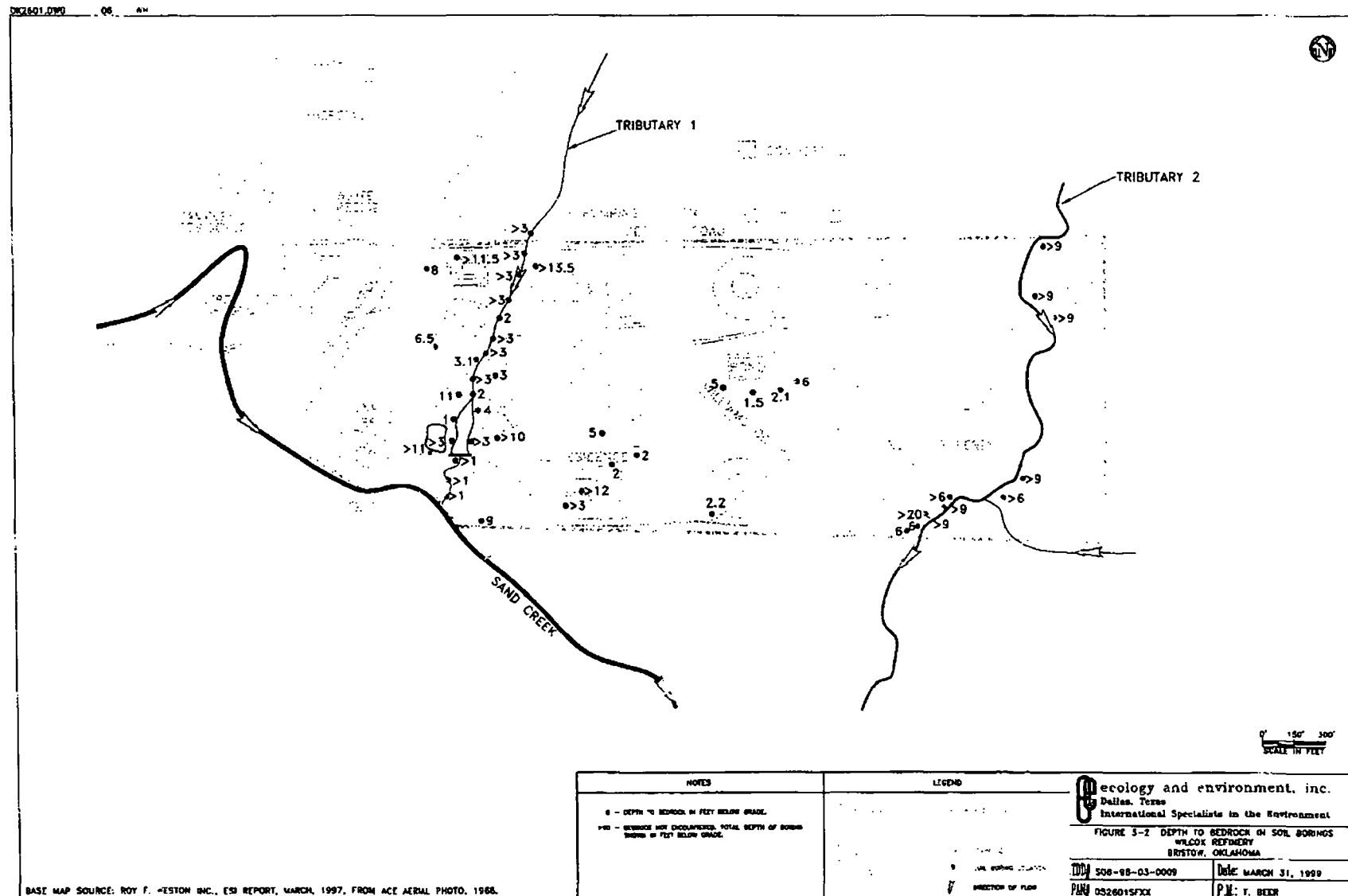


0' 150' 300'
SCALE IN FEET

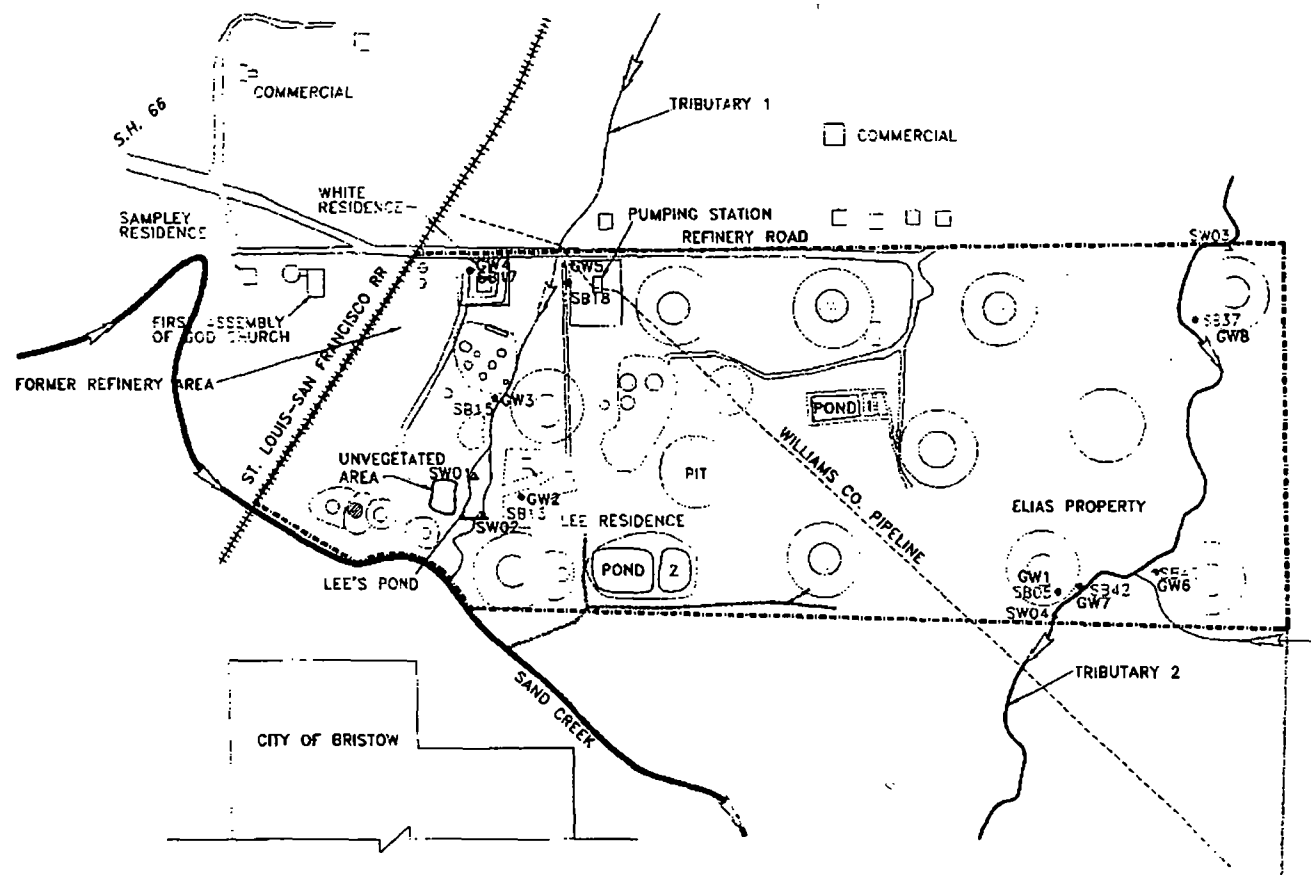
LEGEND	
FORMER BAY LOCATION	WATER BOUNDARY
UNVEGETATED AREA	POND
CRACK	ORANGE RICH
LEEDS	LEEDS BAY-1
LEEDS BAY-2	LEEDS BAY-3
LEEDS BAY-4	LEEDS BAY-5
LEEDS BAY-6	LEEDS BAY-7
LEEDS BAY-8	LEEDS BAY-9
LEEDS BAY-10	LEEDS BAY-11
LEEDS BAY-12	LEEDS BAY-13
LEEDS BAY-14	LEEDS BAY-15
LEEDS BAY-16	LEEDS BAY-17
LEEDS BAY-18	LEEDS BAY-19
LEEDS BAY-20	LEEDS BAY-21
LEEDS BAY-22	LEEDS BAY-23
LEEDS BAY-24	LEEDS BAY-25
LEEDS BAY-26	LEEDS BAY-27
LEEDS BAY-28	LEEDS BAY-29
LEEDS BAY-30	LEEDS BAY-31
LEEDS BAY-32	LEEDS BAY-33
LEEDS BAY-34	LEEDS BAY-35
LEEDS BAY-36	LEEDS BAY-37
LEEDS BAY-38	LEEDS BAY-39
LEEDS BAY-40	LEEDS BAY-41
LEEDS BAY-42	LEEDS BAY-43
LEEDS BAY-44	LEEDS BAY-45
LEEDS BAY-46	LEEDS BAY-47
LEEDS BAY-48	LEEDS BAY-49
LEEDS BAY-50	LEEDS BAY-51
LEEDS BAY-52	LEEDS BAY-53
LEEDS BAY-54	LEEDS BAY-55
LEEDS BAY-56	LEEDS BAY-57
LEEDS BAY-58	LEEDS BAY-59
LEEDS BAY-60	LEEDS BAY-61
LEEDS BAY-62	LEEDS BAY-63
LEEDS BAY-64	LEEDS BAY-65
LEEDS BAY-66	LEEDS BAY-67
LEEDS BAY-68	LEEDS BAY-69
LEEDS BAY-70	LEEDS BAY-71
LEEDS BAY-72	LEEDS BAY-73
LEEDS BAY-74	LEEDS BAY-75
LEEDS BAY-76	LEEDS BAY-77
LEEDS BAY-78	LEEDS BAY-79
LEEDS BAY-80	LEEDS BAY-81
LEEDS BAY-82	LEEDS BAY-83
LEEDS BAY-84	LEEDS BAY-85
LEEDS BAY-86	LEEDS BAY-87
LEEDS BAY-88	LEEDS BAY-89
LEEDS BAY-90	LEEDS BAY-91
LEEDS BAY-92	LEEDS BAY-93
LEEDS BAY-94	LEEDS BAY-95
LEEDS BAY-96	LEEDS BAY-97
LEEDS BAY-98	LEEDS BAY-99
LEEDS BAY-100	LEEDS BAY-101

BASE MAP SOURCE: ROY F. WESTON INC., FSI REPORT, MARCH 1997, FROM AERIAL PHOTO, 1986.

ecology and environment, inc.
Dallas, Texas
International Specialists in the Environment
FIGURE 3-1 SOIL BORING AND SEDIMENT SAMPLE LOCATIONS
WILCOX REFINERY
BRISTOW, OKLAHOMA
TDC SD8-98-03-0008 DATE MARCH 31, 1999
PJM 0526015FXX T. DEER



KMID000130



0' 150' 300'
SCALE IN FEET

LEGEND	
	FORMER TANK LOCATION
	GROUNDWATER WELL
	SURFACE WATER SAMPLE
	DIRECTION OF FLOW
	PROPERTY BOUNDARY
	DRAINAGE DITCH
	RESIDENCE
	COMMERCIAL
	CITY BOUNDARY
	CITY OF BRISTOW

ecology and environment, inc. Dallas, Texas International Specialists in the Environment	
FIGURE 3-3 WATER SAMPLE LOCATIONS WILCOX REFINERY BRISTOW, OKLAHOMA	
NO: 506-98-03-0009	DATE: MARCH 31, 1998
BY: 052601SFXX	P.M.: T. BEER

BASE MAP SOURCE: ROY F. WESTON INC., ESI REPORT, MARCH, 1997, FROM ACE AERIAL PHOTO, 1984.

KM10000131

Table 3-3				
SOIL BORING PARAMETERS WILCOX REFINERY, BRISTOW, OKLAHOMA				
Soil Boring Number	Total Depth (feet)	Depth to Water (feet)	Depth to Bedrock (feet)	Field Observation of Contamination
SB-X	6.0	0.0*	6.0	None observed
SB-1	11.0	0.0*	11.0	Black staining with strong petroleum odor noted from 0.0 to 10 feet bgs
SB-2	2.1	Not encountered	2.1	None observed
SB-3	1.5	Not encountered	1.5	None observed
SB-4	5.0	Not encountered	5.0	Trace dark petroleum staining with slight petroleum odor at 4-feet bgs
SB-5	20.0	15.5	Not encountered	Petroleum odor throughout, trace oil product (0-37), slight staining (4-8'), sheen on groundwater
SB-6	2.2	Not encountered	2.2	None observed
SB-7	5.0	Not encountered	5.0	None observed
SB-8	2.0	Not encountered	2.0	None observed
SB-9	2.2	Not encountered	2.0	None observed
SB-10	4.3	Not encountered	4.0	None observed
SB-11	3.0	Not encountered	3.0	None observed
SB-12	9.0	8.9	9.0	None observed
SB-13	10.0	8.0	Not encountered	Slight to strong petroleum odor noted from 4.0 to 7.5 feet bgs
SB-14	11.0	4.5	Not encountered	Sulfurous, anaerobic decay odor throughout
SB-15	3.1	1.0	3.1	Fill material throughout, consisting of black clinker or ash
SB-16	6.5	4.0	6.5	Petroleum odor noted from 1.1 to 6.1 feet bgs
SB-17	11.5	6.3	Not encountered	Petroleum odor noted from 4.0 to 6.3 feet bgs
SB-18	13.5	8.0	Not encountered	Old gasoline odor throughout, free-phase petroleum product on groundwater
SB-19	8.0	Not encountered	8.0	Petroleum odor and staining noted from 0.0 to 5.2 feet bgs
SB-20	3.0	Not encountered	Not encountered	None observed
SB-21	3.0	Not encountered	Not encountered	None observed
SB-22	3.0	Not encountered	Not encountered	None observed
SB-23	3.0	Not encountered	Not encountered	None observed
SB-24	3.0	Not encountered	2.0	Petroleum odor and staining noted at 2.0 feet bgs
SB-25	3.0	Not encountered	Not encountered	None observed
SB-26	3.0	Not encountered	Not encountered	None observed
SB-27	3.0	Not encountered	Not encountered	None observed
SB-28	2.0	Not encountered	Not encountered	None observed
SB-29	1.0	Not encountered	Not encountered	None observed
SB-30	2.0	Not encountered	Not encountered	Petroleum odor and staining noted 0.0 to 1 feet bgs
SB-31	2.0	Not encountered	Not encountered	Petroleum odor and staining noted 0.0 to 1 feet bgs
SB-32	1.0	Wet throughout	Not encountered	Petroleum odor and staining noted 0.0 to 1 feet bgs
SB-33	1.0	Wet throughout	Not encountered	Petroleum odor and staining noted 0.0 to 1 feet bgs
SB-34	1.0	Wet throughout	Not encountered	Petroleum odor and staining noted 0.0 to 1 feet bgs
SB-35	3.0	Not encountered	Not encountered	Strong petroleum odor from 0 to 3 feet bgs
SB-36	9.0	6.5	Not encountered	Slight petroleum odor noted from 0 to 1 feet bgs
SB-37	9.0	6.5	Not encountered	None observed
SB-38	9.0	1.0	Not encountered	None observed
SB-39	9.0	1.0	Not encountered	None observed
SB-40	2.0	3.5	Not encountered	None observed
SB-41	4.0	2.5	Not encountered	None observed
SB-42	4.0	2.5	Not encountered	None observed
SB-43	4.0	6.5	Not encountered	None observed
SB-44	5.0	4.5	Not encountered	None observed
SB-45	9.0	1.0	Not encountered	None observed
SB-46	12.0	Not encountered	Not encountered	Strong petroleum odor and staining from 0.0 to 12.0 feet bgs

Key:

* - Boring was completed on April 27, 1998. Due to 4 inches of rainfall on April 26, the ground surface was saturated
bgs - Below ground surface

The nature and extent of the spill impact at Wilcox refinery was assessed using field and analytical laboratory data. A summary of analytical results is discussed below by sampling media. Table 4-1 presents organic analytical results for sediment and subsurface soil samples, Table 4-2 presents inorganic analytical results for sediment and subsurface soil samples, and Table 4-3 presents analytical results for ground water samples. Analytical results for soil are reported as milligrams per kilogram (mg/kg), and all ground water data are presented in milligrams per liter (mg/L). The complete analytical data package from the sampling program at Wilcox is presented in Appendix I. The overall analytical data quality is assessed in Section 4.6 and summarized in Table 4-4. A preliminary estimate of the waste quantity on site based on a spatial evaluation of the analytical data is presented in Section 4.7, and summarized in Table 4-5.

The soil, ground water, surface water, and sediment analytical data were reviewed and qualified under U.S. EPA data validation guidelines (U.S. EPA 1994a, 1994b). Data qualifiers are assigned in the data tables when necessary, to indicate that caution should be exercised when using these results. The significance of detected analyte concentrations for each medium is evaluated in Section 4.6, based on comparison with selected chemical-specific regulatory criteria. For data presentation purposes, only site data greater than regulatory screening levels to be considered (TBC) materials for any organic sample (Table 5-1) or '20 times' toxicity characteristic leaching procedure (TCLP) inorganic criteria (Table 5-2), are presented. Further discussion of organic and inorganic TBCs can be found in Section 5.

4.1 Soil Analytical Results

A total of 55 soil samples were collected from 46 soil borings and analyzed for BTEX compounds, TPH, and PAHs (organics); and for metals and pH (inorganics). The soil sampling results are presented below for each type of analysis.

4.1.1 Organics

Twenty-five organic compounds were detected in site soil, including all four BTEX compounds: benzene, toluene, ethylbenzene, and xylenes (Table 4-2). Of these compounds, xylenes (total) was detected most frequently (12 of 55 samples). Ethylbenzene and toluene were each detected in 11 of 55 samples, and benzene was detected in seven of 55 samples. The areal distribution of BTEX compounds in soil at concentrations greater than screening levels is shown in Figure 4-1. The maximum detected benzene concentration is 2.2 mg/kg from SB16 at 5 to 6 feet bgs. The maximum detected concentrations for ethylbenzene (670 mg/kg), toluene (410 mg/kg), and xylenes (2,700 mg/kg) were from SB01 at 0 to 0.5 feet bgs.

Seventeen of 18 PAHs analyzed for were detected, with acenaphthylene not detected. Phenanthrene was detected most frequently, it was present in 26 of 55 samples. Benzo(a)-anthracene was detected 23 times, and benzo(b)fluoranthene and detected 21 times (Table 4-1). The areal distribution of PAHs in soil at concentrations greater than screening levels is shown in Figure 4-1. The maximum concentrations for all PAHs detected occurred in SB15 at 0 to 1 foot bgs. Elevated concentrations of most PAHs were also noted in SB34 at 0 to 1 foot bgs.

Total petroleum hydrocarbons (TPH) were detected in 15 of 55 samples (Table 4-1). The areal distribution of TPH in soil at concentrations greater than screening levels is shown in Figure 4-1. The maximum detected TPH concentration is 280,000 mg/kg in SB15 at 0 to 1 foot bgs. Elevated concentrations of TPH were also noted at soil boring locations SB01, SB05, SB14, SB16, SB17, SB18, SB19, SB20, SB24, SB33, and SB34. Elevated BTEX and PAH results often occur significantly at locations with elevated TPH concentrations.

4.1.2 Inorganics

Metals are naturally occurring elements in soils. For screening the significance of results, metal concentrations detected in on-site soil samples were compared to a factor of "20 times TCLP criteria" based on the extraction methodology of the toxicity characteristic leaching procedure (TCLP) (40 CFR 261). For presentation purposes, metal concentrations exceeding the TCLP based screening factor are highlighted in Table 4-2, and presented spatially in Figure 4-2.

Twenty-one of the 23 metals analyzed were detected in site soil, four of which were detected in all 55 samples analyzed (aluminum, calcium, iron, and manganese). Barium, chromium, potassium, and zinc were each detected in 54 samples. Based on lead as the key indicator metal of concern at refinery sites, the maximum lead concentration is 15,200 mg/kg in sample SB35 at 0 to 3 feet bgs in Pond 2. Elevated lead concentrations are also present

throughout the Tributary 1 stream bed; however, the maximum concentration along this pathway, 1,960 mg/kg, occurs in the off-site, upstream sample at SB20, from 0 to 3 feet bgs. This indicates that upstream sources on the Ohio Oil refinery site and multiple on-site sources (Figure 2-4) may have contributed to documented lead impacts in the Tributary 1 stream channel on the Wilcox site (Figure 4-2).

Soil pH is a measure of acidity and an indicator of unnatural site conditions. Refinery wastes can be extremely acidic due to the presence of sulfur compounds, and oil field brines and drilling muds are typically caustic. A neutral pH is 7, with extreme acid conditions being less than 2, and elevated caustic conditions greater than 12. The results from pH testing of soil samples are presented in Table 4-2. A total of seven soil samples from different borings have a pH less than 4, with no pH results greater than 10. The two lowest values, 2.3 in SB08 at 1 to 2 feet bgs, and 2.8 in SB10 at 3 to 4 feet bgs, appear to be unnaturally acidic conditions. Potential sources exist upgradient at each location: the "Oily Waste Pit" near SB08, and backfilled ponds beneath and south of the Lee residence near SB10 (see Figures 2-4 and 3-1).

4.2 Ground Water Analytical Results

A total of eight ground water samples and one duplicate were collected where ground water was encountered in soil borings, and analyzed for BTEX compounds and TPH. The ground water sampling results are presented below for each type of analysis.

4.2.1 Benzene, Toluene, Ethylbenzene, and Xylenes

A summary of BTEX compounds detected in ground water samples at the Wilcox site is presented in Table 4-3, and the areal distribution of contamination is depicted in Figure 4-3. Ethylbenzene was detected most often, in five of eight samples. Xylenes are present in four samples, benzene was detected in two samples, and toluene was detected in one of the eight samples. The maximum detected concentrations of benzene (8.9 mg/L), ethylbenzene (3.3 mg/L), and xylenes (9.1 mg/L) were in sample GW5 from SB18 near the fenced Sun Oil Company property. Note that a thin petroleum product layer was observed in this sample vial.

4.2.2 Total Petroleum Hydrocarbons

A summary of TPH carbon ranges detected in ground water samples at the Wilcox site is presented in Table 4-3, and the areal distribution of contamination is depicted in Figure 4-3. TPH was not analyzed in sample GW8 due to the low sample volume present. TPH in both the gasoline carbon range (C6-C10) and kerosene/diesel/lube oil carbon range (C10-C28) was

detected in samples GW1, GW2, and GW5. The maximum detected concentrations of C6-C10 hydrocarbons (3,300 mg/L), and C10-C28 hydrocarbons (5,900 mg/L), were in sample GW5 from SB18, coinciding with the maximum detections of BTEX compounds. The elevated concentration of TPH in GW4 at SB17 is also significant because of its location in the fenced yard of the White's residence (Figure 4-3).

4.3 Surface Water Analytical Results

A total of four surface water samples that were most representative of upstream versus downstream conditions were collected from available locations in Tributaries 1 and 2. Due to low flow conditions, samples could only be obtained from Lee's Pond on Tributary 1, and isolated pools in Tributary 2. Each sample was analyzed for BTEX compounds and TPH.

No BTEX compounds or TPH were detected in site surface water samples. Detection limits and the analytical data package are presented in Appendix I.

4.4 Sediment Analytical Results

Two sediment samples were collected to assess the potential for contaminant migration from Pond 2 to Sand Creek via the surface water runoff pathway. The sediment samples were analyzed for BTEX compounds, TPH, and PAHs (organics) and for metals and pH (inorganics). It should be noted that the subsurface soil samples identified as SB20 to SB34 were collected from the dry creek bed of Tributary 1, and should be considered along with all sediment data in the evaluation of site impacts to the surface water migration pathway, and waters of the United States. The sediment sampling results from samples SED11 and SED12 are presented below for each type of analysis.

4.4.1 Organics

No BTEX compounds or TPH were detected in site sediment samples. Detection limits are specified in Table 4-1 and in the analytical data package, presented in Appendix I.

Seven of 18 PAHs analyzed for were detected in site sediment. Benzo(a)anthracene, benzo(a)pyrene, and pyrene were detected in each sample; and benzo(b)fluoranthene, chrysene, fluoranthene, and phenanthrene were each detected once (Table 4-1). The highest level of PAH detected was pyrene, which was detected in SED11 at 0.41 mg/kg and in SED12 at 0.12 mg/kg. No pattern in the concentration of PAHs in the upstream (SED12) versus the downstream (SED11) sample could be discerned.

4.4.2 Inorganics

Metals are naturally occurring elements in sediment. Antimony, beryllium, cadmium, mercury, selenium, silver, and thallium were not detected in the site samples. The analytical results for metals detected in sediment samples are summarized in Table 4-2. Fifteen of the 23 metals analyzed for were detected in site sediment, 13 of which were detected in both samples analyzed. Based on lead as the key indicator metal of concern at refinery sites, the concentrations of lead in sediment are 32.4 mg/kg in SED11 at Sand Creek, and 16.7 mg/kg in SED12 at Pond 2. As a reference, these concentrations are significantly lower than the maximum lead concentration for the Wilcox site (15,200 mg/kg), which was collected upstream in Pond 2 soil at SB35 (see Section 4.1.2). The sediment samples from the Pond 2 flow path do not show elevated concentrations from Pond 2 metals contamination. There was no discernable pattern in the concentration of metals in the upstream (SED12) versus the downstream (SED11) sample.

The pH result of 7.1 for each sediment sample is neutral with respect to acidic or basic site conditions. By comparison, subsurface soil samples collected from Pond 2 have pH levels of 5.1 and 6.2.

4.5 HAZCAT Result

One sample of a solid waste from the unvegetated area on the White property was subjected to HAZCAT field testing. No other waste sources were deemed appropriate for testing due to the oily nature of the matrices or adequate waste characterization from the ESI sampling program.

The following list indicates the qualitative HAZCAT test tube results for the waste sample:

- Sample Description: grey, granular, solid waste, fertilizer-type odor,
- Specific Gravity: >1,
- Water Reactivity: Negative,
- Solubility: Sparingly soluble,
- pH: 5.5,
- Presence of Oxidizers: Negative,
- Sulfide: Not Applicable if pH <7,
- Cyanide: Not Applicable if pH <7,

-
- Chlorinated Hydrocarbons - Copper Wire Test: Negative,
 - Chlorinated Hydrocarbons - PCB Test Kit: Positive, greater than 50 ppm, and
 - Flammability: Negative,

The only significant positive result from the HAZCAT testing was from the polychlorinated biphenyl (PCB) test kit. A previous sample taken from the unvegetated area during the ESI revealed non-detects for all EPA target analyte list (TAL) pesticides and PCBs. This positive HAZCAT test result for PCBs appears to be a false positive result due to the following possible interferences identified in the field test kit manufacturer's instructions: excess moisture, inorganic chlorides, or the presence of other chlorinated organic compounds (i.e., solvents, pesticides).

4.6 Data Quality Assessment

Data quality assessment is a qualitative and quantitative review performed on the analytical results generated from the site sampling program to establish the usability of the data. Initially, all START laboratory data were validated and qualified according to EPA data review procedures (U.S. EPA 1994a, 1994b). Data qualifiers are presented in the appropriate data tables in this section and explained in detail in the data validation reports in Appendix J. Quality of the validated data was assessed in terms of precision, accuracy, representativeness, comparability, and completeness (PARCC) parameters, in accordance with EPA guidance (U.S. EPA 1990). A summary of the methodology and results from the evaluation of each PARCC parameter is presented below, and summarized in Appendix J.

4.6.1 Precision

Precision is a quantitative measure of the variability between duplicate samples. Precision is expressed as the relative percent difference (RPD) in concentration between duplicate pairs of field duplicates, matrix spikes (MS), and laboratory duplicates.

Although some precision data results are outside QC criteria, the overall usability of the qualified data is not compromised. The instances where data precision did not meet QC criteria are attributable to interferences in the matrix, high concentrations of target compounds, or relatively few data points to determine correlations and conclusions.

4.6.2 Accuracy

Accuracy is a quantitative measure of the recoverability of known amounts ("spikes") of target compounds for each analytical method. Accuracy is reported as the percent recovery (%R) of the known spike concentration minus the original sample result for MS, surrogate recoveries, and laboratory control samples (LCS).

Data for five metals (antimony, beryllium, arsenic, cadmium, and cobalt) in 10 samples were unusable (R) due to poor recoveries in one MS sample. Post spike recoveries were acceptable, indicating a possible digestion problem in one batch of samples at the laboratory. Discretion should be used when evaluating the site impact of these target compounds. With the exception of the unusable metals data, the overall usability of the data is acceptable with respect to accuracy. Other instances where data fail to meet accuracy QC criteria are considered isolated and not indicative of overall poor method performance.

4.6.3 Representativeness

Representativeness is a qualitative evaluation of the extent to which the analytical data reflect actual site conditions. Acceptable representativeness is achieved by proper sampling and sample management procedures.

The overall usability of the data is acceptable with respect to representativeness. Limited qualifications were assigned to the data for calibration or preparation blank contaminants, exceedence of serial dilution criteria, and internal standard deficiencies. In instances where data qualifiers are applied, some discretion should be used when evaluating potential site impacts of the data.

4.6.4 Comparability

Comparability is a qualitative parameter that expresses the confidence with which one data set can be compared to another. Analytical comparability is considered acceptable for this investigation because:

- The investigation consistently utilized the same analytical laboratory, sample preparation routine, and analytical methods (within each phase of work);
- The analytical results for each analysis are reported with consistent detection limits and units of measure; and
- Soil/sediment results are reported on a dry weight basis, allowing for comparison between samples and with regulatory criteria.

4.6.5 Completeness

Completeness is a measure of the amount of usable data resulting from the analytical program at the site. Analytical completeness is defined as the percentage of acceptable data points. Only unusable data (qualified "R" during data validation) is excluded when assessing compliance with the completeness goal of 90% (U.S. EPA 1990). Completeness is calculated per analytical method, but is also evaluated by individual analyte per matrix in Table 4-4.

For the Wilcox refinery site assessment data set, the analytical completeness for BTEX and PAH testing is 100%. A total of 55 metals data points were determined to be unusable due to laboratory data quality problems, resulting in an overall acceptable completeness of 96%. However, antimony, arsenic, beryllium, cadmium, and cobalt in soil did not meet the completeness goal of 90% and care should be used when assessing the impact of these individual metals at the site (Table 4-4).

One TPH in water sample was proposed but not analyzed due to low sample volume, resulting in an overall method completeness of 98.5%. However, TPH in water did not meet the completeness goal of 90% and care should be taken when evaluating this data set.

A summary of the quantitative data quality assessment criteria used to evaluate site data (i.e., precision, accuracy, representativeness, and completeness) and a comparison with actual data quality achieved for the project is presented in Appendix J.

4.7 Waste Quantity

During planning of the sampling program for this investigation, a list of potential waste source areas was developed based on the results of the previous ESI, and from START visual observations during initial site visits. Then, from the analytical results in each source area, and with the interpretation of source-specific soil boring logs and reasonable assumptions, the volume of contaminated material in each source area was estimated. A summary list of waste sources and estimated waste quantities is presented in Table 4-5. At this time, it is estimated that a minimum of approximately 73,000 cubic yards of solid waste (contaminated soil, coking cinders waste, tarry waste, etc.), and 2,960 gallons of liquid waste (tank bottom sludge, oily liquid, and product in existing ASTs) exists at the Wilcox site.

The liquid waste volume referred to in the last Table 4-5 entry for the 'Lower reaches of Tributary 1,' is for a brown, degraded, oily liquid entering Tributary 1 via a buried pipeline from the White property. During the low flow conditions observed on August 5, 1998, the volume of flow was estimated at less than 1 gallon per minute. Historical effects from this and other sources have visibly stained the stream bed black for at least 250 feet downstream. During this

dry period, no flow from Tributary 1 entered Sand Creek, approximately 300 feet south of the pipeline source. Note that the source inventory may be incomplete. the estimated waste quantity at some identified potential source areas remains unknown, and the liquid waste quantity does not include known areas of contaminated, shallow ground water at the site.

Table 4-1

**ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Sample Location Depth (ft)	SED11 0-1	SED12 0-1	SH01 0-0.5	SB01 10-11	SB02 1-2	SB03 1.5-2	SH04 4-5	SB05 1-2	SB05 4-5
Analyte									
Volatiles (BTX) - mg/kg									
Benzene	<0.00075	<0.00074	<4.3	0.017	<0.0021	<0.0021	<0.0021	<0.0023	0.040
Ethylbenzene	<0.00088	<0.0011	<4.3	0.25	<0.0021	<0.0021	<0.0021	<0.0023	0.84
Toluene	<0.0011	<0.00086	<4.3	0.23	<0.0021	<0.0021	<0.0021	0.034	0.018
Xylene (total)	<0.0025	<0.0025	2,600	0.76	<0.0021	<0.0021	<0.0021	<0.0023	1.1
Semi-Volatiles (PAHs) - mg/kg									
Acenaphthene	<0.25	<0.25	<2.2	<0.24	<0.21	<0.21	<0.21	<1.1	<2.5
Acenaphthylene	<0.25	<0.25	<2.2	<0.24	<0.21	<0.21	<0.21	<1.1	<2.5
Anthracene	<0.025	<0.025	<0.22	<0.024	<0.021	<0.021	<0.021	<0.11	<0.25
Benzo(a)anthracene	0.049	0.033	0.57	<0.024	<0.021	<0.021	<0.021	0.14	0.67
Benzo(b)fluoranthene	<0.025	0.095	<0.22	<0.024	<0.021	<0.021	<0.021	0.080 JK	0.25
Benzo(k)fluoranthene	<0.025	<0.025	0.35	<0.024	<0.021	<0.021	<0.021	0.091 JK	0.17 JK
Benzo(a)pyrene	0.041	0.041	<0.22	<0.024	<0.021	<0.021	<0.021	0.11	0.20 JK
Benzo(ghi)perylene	<0.062	<0.062	<0.54	<0.060	<0.053	<0.053	<0.053	<0.28	<0.62
Chrysene	0.064	<0.025	<0.22	<0.024	<0.021	<0.021	<0.021	<0.11	<0.25
Dibenzo(a,h)anthracene	<0.062	<0.062	<0.54	<0.060	<0.053	<0.053	<0.053	<0.28	<0.62
Fluoranthene	0.089	<0.062	<0.22	0.073	<0.053	<0.053	<0.053	0.35	2.5
Fluorene	<0.025	<0.025	<0.22	<0.024	<0.021	<0.021	<0.021	<0.11	<0.25
Indeno(1,2,3-cd)pyrene	<0.025	<0.025	<0.22	<0.024	<0.021	<0.021	<0.021	<0.11	<0.25
1-Methylnaphthalene	<0.25	<0.25	<2.2	<0.24	<0.21	<0.21	<0.21	<1.1	4.6
2-Methylnaphthalene	<0.25	<0.25	<2.2	0.34	<0.21	<0.21	<0.21	<1.1	5.3
Naphthalene	<0.25	<0.25	<2.2	<0.24	<0.21	<0.21	<0.21	<1.1	<2.5
Phenanthrene	0.040	<0.025	<0.22	0.052	<0.021	<0.021	<0.021	<0.11	1.2
Pyrene	0.410	0.12	<0.22	0.14	<0.053	<0.053	<0.053	<0.28	<0.62
TPH - mg/kg									
C6 - C10 Hydrocarbons	<31	<31	2,600	370	<53	<53	<53	<57	700
>C10 - C28 Hydrocarbons	<31	<31	1,500	120	<53	<53	<53	<57	2,600
TPH C6 - C28 Hydrocarbons	<62	<62	<4,100	<490	<53	<53	<53	<57	<2,600

Key at end of table.

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Table 4-1 (cont.)

ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA

Sample Location Depth (ft)	SB05 14-15	SB06 1-2	SB07 4-5	SB07D 4-5	SB08 1-2	SB09 1-2	SB10 3-4	SB11 2-3	SB12 1-2
Analyte									
Volatiles (BTEX) - mg/kg									
Benzene	0.0043	<0.0023	<0.0023	<0.0022	<0.0022	<0.0023	<0.0022	<0.0024	<0.0023
Ethylbenzene	0.023	<0.0023	<0.0023	<0.0022	<0.0022	<0.0023	<0.0022	<0.0024	<0.0023
Toluene	<0.0024	<0.0023	<0.0023	<0.0022	<0.0022	<0.0023	<0.0022	<0.0024	<0.0023
Xylene (total)	0.078	<0.0023	<0.0023	<0.0022	<0.0022	<0.0023	<0.0022	<0.0024	<0.0023
Semi-Volatiles (PAHs) - mg/kg									
Acenaphthene	<1.2	<0.23	<0.23	<0.22	<0.22	<0.23	<0.22	<0.24	<0.23
Acenaphthylene	<1.2	<0.23	<0.23	<0.22	<0.22	<0.23	<0.22	<0.24	<0.23
Anthracene	<0.12	<0.023	<0.023	<0.022	<0.022	<0.023	<0.022	<0.024	<0.023
Benzo(a)anthracene	0.43	0.015 JK	<0.023	0.031	<0.022	0.039	<0.022	0.072	<0.023
Benzo(b)fluoranthene	0.15 JK	0.025	<0.023	0.064	<0.022	0.016 JK	<0.022	0.088	<0.023
Benzo(k)fluoranthene	0.12 JK	<0.023	<0.023	0.017 JK	<0.022	0.024	<0.022	0.059	<0.023
Benzo(a)pyrene	0.15	0.031	<0.023	0.07	<0.022	0.044	<0.022	0.11	<0.023
Benzo(ghi)perylene	<0.30	0.028 JK	<0.057	<0.056	<0.054	<0.057	<0.056	0.039 JK	<0.057
Chrysene	0.13 JK	0.025	<0.023	<0.022	<0.022	0.056	<0.022	0.12	<0.023
Dibenzo(a,h)anthracene	<0.30	<0.057	<0.057	<0.056	<0.054	<0.057	<0.056	<0.059	<0.057
Fluoranthene	1.5 JK	0.066	<0.057	<0.056	<0.054	0.061	<0.056	0.14	<0.057
Fluorene	0.12	<0.023	<0.023	<0.022	<0.022	<0.023	<0.022	<0.024	<0.023
Indeno(1,2,3-cd)pyrene	<0.12	<0.023	<0.023	<0.022	<0.022	<0.023	<0.022	0.028	<0.023
1-Methylnaphthalene	1.8	<0.23	<0.23	<0.22	<0.22	<0.23	<0.22	<0.24	<0.23
2-Methylnaphthalene	2.3	<0.23	<0.23	<0.22	<0.22	<0.23	<0.22	<0.24	<0.23
Naphthalene	<1.2	<0.23	<0.23	<0.22	<0.22	<0.23	<0.22	<0.24	<0.23
Phenanthrene	0.74	0.031	<0.023	<0.022	<0.022	0.068	<0.022	0.042	<0.023
Pyrene	<0.30	<0.057	<0.057	0.084	<0.054	<0.057	<0.056	0.12	<0.057
TPH - mg/kg									
C6 - C10 Hydrocarbons	260	<57	<57	<56	<54	<57	<56	<59	<57
>C10 - C28 Hydrocarbons	730	<57	<57	<56	<54	<57	<56	<59	<57
TPH C6 - C28 Hydrocarbons		<57	<57	<56	<54	<57	<56	<59	<57

Key at end of table.

Table 4-1 (cont.)

**ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Sample Location (Depth (ft))	SB12 8-9	SB13 1-2	SB13 6.5-7.5	SB13D 6.5-7.5	SB14 1-2	SB14 5-6	SB15 0-1	SB16 5-6	SB17 1-2
Analyte									
Volatiles (VTEX) - mg/kg									
Benzene	<0.0023	<0.0022	<0.012	<0.011	<0.011	<0.09	0.31		<0.0022
Ethylbenzene	<0.0023	<0.0022	<0.012	0.023	<0.011	<0.11	0.95	1.6 JH	<0.0022
Toluene	<0.0023	<0.0022	<0.012	<0.011	<0.011	0.26	0.65	3.0 JH	<0.0022
Xylene (total)	<0.0023	<0.0022	0.013	0.091	<0.011	<0.30	9.8	3.5 JH	<0.0022
Semi-Volatiles (PAHs) - mg/kg									
Acenaphthene	<0.23	<0.22	<0.23	<0.23	<0.23	<0.24	<2500	<12	<0.22
Acenaphthylene	<0.23	<0.22	<0.23	<0.23	<0.23	<0.24	<2500	<12	<0.22
Anthracene	<0.023	<0.022	<0.023	<0.023	<0.023	<0.024		1.5	<0.022
Benzo(a)anthracene	<0.023	0.021 JK	<0.023	<0.023	0.10	0.012 JK		3.0	0.0049 JK
Benzo(b)fluoranthene	<0.023	0.056	<0.023	<0.023	0.0118 JK	<0.024		0.72 JK	<0.022
Benzo(k)fluoranthene	<0.023	0.0118 JK	<0.023	<0.023	<0.023	<0.024		1.2 JK	<0.022
Benzo(a)pyrene	<0.023	0.074	<0.023	<0.023	<0.023	<0.024		2.0	0.037
Benzo(g,h)perylene	<0.058	0.04 JK	<0.058	<0.057	<0.057	<0.06	<620	<3.0	<0.056
Chrysene	<0.023	0.043	<0.023	<0.023	<0.023	<0.024		<1.2	<0.022
Dibenzo(a,h)anthracene	<0.058	<0.056	<0.058	<0.057	<0.057	<0.06	<620	<3.0	<0.056
Fluoranthene	<0.058	0.076	<0.058	<0.057	0.65	<0.06		16	<0.056
Fluorene	<0.023	<0.022	<0.023	<0.023	<0.023	<0.024		3.5	<0.022
Indeno(1,2,3-cd)pyrene	<0.023	0.027	<0.023	<0.023	<0.023	<0.024	<250	<1.2	<0.022
1-Methylnaphthalene	<0.23	<0.22	<0.23	<0.23	<0.23	0.24	<2,500	17	<0.22
2-Methylnaphthalene	<0.23	<0.22	<0.23	<0.23	2.3	<0.24		28	<0.22
Naphthalene	<0.23	<0.22	<0.23	<0.23	<0.23	<0.24	<2500	<12	<0.22
Phenanthrene	<0.023	0.038	<0.023	<0.023	0.092	<0.072		12	<0.067
Pyrene	<0.058	<0.056	<0.058	<0.057	<0.057	<0.06		3.6	<0.056
TPH - mg/kg									
C6 - C10 Hydrocarbons	<58	<56	<58	<57	<57	<60	8,600	350	<56
>C10 - C28 Hydrocarbons	<58	<56	<58	<57	100	170	270,000	2,100	<56
TPH C6 - C28 Hydrocarbons	<58	<56	<58	<57					<56

Key at end of table.

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Table 4-1 (cont.)

**ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Sample Location Depth (ft)	SB17D 1-2	SB17 5.5-6.5	SB18 1-2	SB18 7-8	SB19 1-2	SB19 7-8	SB20 0-3	SB21 0-3	SB22 0-3
Analyte									
Volatiles (BTEX) - mg/kg									
Benzene	<0.0022	0.13	<0.006	0.36	<0.0022	<0.0023	<0.0054 JL	<0.0051	<0.0053
Ethylbenzene	<0.0022	4.0	1.4	7.9	0.017 JH	<0.0023	<0.0054 JL	<0.0051	<0.0053
Toluene	<0.0022	2.8	0.24	0.39	0.0093 JH	<0.0023	<0.0054 JL	<0.0051	<0.0053
Xylene (total)	<0.0022	15	0.89	8.9	0.061 JH	<0.0023	<0.0054 JL	<0.0051	<0.0053
Semi-Volatiles (PAHs) - mg/kg									
Acenaphthene	<0.22	0.78	<0.23	<4.7	<22	<0.23	<0.36	<0.34	<0.35
Acenaphthylene	<0.22	<0.23	<0.23	<4.7	<22	<0.23	<0.36	<0.34	<0.35
Anthracene	<0.022	<0.023	<0.023	0.54	<2.2	<0.023	<0.36	<0.34	<0.35
Benzo(a)anthracene	<0.022	0.049	0.033	0.45 JK	2.8	0.012 JK	<0.36	<0.34	<0.35
Benzo(b)fluoranthene	<0.022	<0.023	0.0066 JK	<0.47	0.73 JK	<0.023	<0.36	<0.34	<0.35
Benzo(k)fluoranthene	<0.022	<0.023	<0.023	<0.47	<2.2	<0.023	<0.36	<0.34	<0.35
Benzo(a)pyrene	<0.022	<0.023	0.026	<0.47	1.2 JK	<0.023	<0.36	<0.34	<0.35
Benzo(ghi)perylene	<0.056	<0.057	<0.057	<1.2	<5.6	<0.057	<0.36	<0.34	<0.35
Chrysene	<0.022	<0.023	<0.023	<0.47	<2.2	<0.023	<0.36	<0.34	<0.35
Dibenzo(a,h)anthracene	<0.056	<0.057	<0.057	<1.2	<5.6	<0.057	<0.36	<0.34	<0.35
Fluoranthene	<0.056	0.11	0.28	5.4	<5.6	<0.057	<0.36	<0.34	<0.35
Fluorene	<0.022	0.048	0.044	1.4	<2.2	<0.023	<0.36	<0.34	<0.35
Indeno(1,2,3-cd)pyrene	<0.022	<0.023	<0.023	<0.47	<2.2	<0.023	<0.36	<0.34	<0.35
1-Methylnaphthalene	<0.22	0.52	<0.23	13	<22	<0.23	NA	NA	NA
2-Methylnaphthalene	<0.22	0.69	0.41	16	<22	<0.23	NA	NA	NA
Naphthalene	<0.22	0.59	<0.23	<4.7	<22	<0.23	<0.36 JK	<0.34 JK	<0.35 JK
Phenanthrene	<0.067	0.074	0.18	4.4	<6.7	<0.068	<0.36	<0.34	<0.35
Pyrene	<0.056	<0.057	0.13	2.2	<5.6	<0.057	<0.36	<0.34	<0.35
TPH - mg/kg									
C6 - C10 Hydrocarbons	<56	750	<57	550	200	<57	<54.1	<51.1	<52.8
C10 - C28 Hydrocarbons	<56	310	<57	440	3,400	<57	<54.1	<51.1	<52.8
TPH C6 - C28 Hydrocarbons	<56	<57	<57	<57	<57	<57	NR	NK	NR

Key at end of table.

Table 4-1 (cont.)

**ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Sample Location Depth (ft)	SB23 0-3	SB24 0-2	SB25 0-3	SB26 0-2	SB27 0-3	SB28 0-2	SB29 0-1	SB30 0-3	SB31 0-3
Analyte									
Volatiles (HTEX) - mg/kg									
Benzene	<0.0051 JL	<0.0058 JL	<0.0051 JL	<0.0051 JL	<0.0052	<0.0052 JL	<0.0051	<0.0056	<0.0059
Ethylbenzene	<0.0051 JL	<0.0058 JL	<0.0051 JL	<0.0051 JL	<0.0052	<0.0052 JL	<0.0051	<0.0056	<0.0059
Toluene	<0.0051 JL	<0.0058 JL	<0.0051 JL	<0.0051 JL	<0.0052	<0.0052 JL	<0.0051	<0.0056	<0.0059
Xylene (total)	<0.0051 JL	<0.0058 JL	<0.0051 JL	<0.0051 JL	<0.0052	<0.0052 JL	<0.0051	<0.0056	<0.0059
Semi-Volatiles (PAHs) - mg/kg									
Acenaphthene	<0.34	<0.39	<0.34	<0.34	<3.5 JK	<3.5 JK	<3.4 JK	<3.7 JK	<4.0 JK
Acenaphthylene	<0.34	<0.39	<0.34	<0.34	<3.5 JK	<3.5 JK	<3.4 JK	<3.7 JK	<4.0 JK
Anthracene	<0.34	<0.39	<0.34	<0.34	<3.5	4.9	<3.4	<3.7	<4.0
Benzo(a)anthracene	0.38	0.61	0.61	0.30	<3.5 JL	<3.5 JL	<3.4 JL	<3.7 JL	<4.0 JL
Benzo(b)fluoranthene	0.26	<0.39	0.52	0.26	0.50 JH	1.5 JH	0.40 JH	<3.7 JK	<4.0 JK
Benzo(k)fluoranthene	<0.34	<0.39	<0.34	<0.34	<3.5	<3.5 JK	0.48 JH	<3.7 JK	<4.0 JK
Benzo(a)pyrene	0.34	<0.39	0.41	0.23	0.57 JH	2.9 JH	0.75 JH	<3.7 JK	<4.0 JK
Benzo(ghi)perylene	0.57	<0.39	0.27	0.30	0.54 JH	1.1 JH	<3.4 JK	<3.7 JK	<4.0 JK
Chrysene	0.85 JH	<0.39	0.81 JH	0.65 JH	1.7 JH	5.4	1.2	<3.7	0.77
Dibenzo(a,h)anthracene	<0.34	<0.39	<0.34	<0.34	<3.5 JK	0.53 JH	<3.4	<3.7 JK	<4.0 JK
Fluoranthene	<0.34	<0.39	0.85 JH	<0.34	0.40 JH	1.5	0.34	<3.7	<4.0
Fluorene	<0.34	<0.39	<0.34	<0.34	<3.5 JK	<3.5 JK	<3.4	<3.7 JK	<4.0 JK
Indene(1,2,3-cd)pyrene	<0.34	<0.39	0.21	<0.34	<3.5 JK	0.51 JH	0.36 JH	<3.7 JK	<4.0 JK
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	0.18 JH	<0.39	<0.34 JK	<0.34 JK	<3.5 JK	0.37 JH	<3.4	<3.7 JK	<4.0 JK
Phenanthrene	1.5	0.76	1.3	1.1	1.7 JH	4.8	1.5	<3.7	0.70
Pyrene	1.2	1.5	1.2	0.72	1.9 JH	6.6	1.3	<3.7	0.70
TPH - mg/kg									
C6 - C10 Hydrocarbons	<51.1	<58.4	<50.9	<51.4	<52.6	<52.3	<51.2	<56.1	<59.4
>C10 - C28 Hydrocarbons	<51.1	<58.4	<50.9	<51.4	<52.6	<52.3	<51.2	<56.1	<59.4
TPH C6 - C28 Hydrocarbons	NR	NR	NR	NR	NR	NR	NR	NR	NR

Key at end of table.

KMI0000146

Table 4-1 (cont.)

**ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Sample Location Depth (ft)	SB32 0-1	SB32D 0-1	SB33 0-1	SB34 0-1	SB35 0-3	SB36 6-7	SB37 6-7	SB38 0-1	SB39 3-4
Analyte									
Volatiles (BTEX) - mg/kg									
Benzene	<0.0087	<0.0086	<0.0064	<0.0064	<0.0057	<0.0051 JL	<0.0054 JL	<0.0060 JL	<0.0060
Ethylbenzene	<0.0087	<0.0086	<0.0064	0.14	<0.0057	<0.0051 JL	<0.0054 JL	<0.0060 JL	<0.0060
Toluene	<0.0087	<0.0086	<0.0064	<0.0064	<0.0057	<0.0051 JL	<0.0054 JL	<0.0060 JL	<0.0060
Xylene (total)	<0.0087	<0.0086	0.082	<0.0064	<0.0057	<0.0051 JL	<0.0054 JL	<0.0060 JL	<0.0060
Semi-Volatiles (PAHs) - mg/kg									
Acenaphthene	<0.58	<0.58	<0.43	2.3	<0.38	<0.37	<0.36	<0.40	<0.39
Acenaphthylene	<0.58	<0.58	<0.43	<4.0	<0.38	<0.37	<0.36	<0.40	<0.39
Anthracene	<0.58	<0.58	<0.43	19	<0.38	<0.37	<0.36	<0.40	<0.39
Benzo(a)anthracene	<0.58 JL	<0.58 JL	0.35 JL	<4.0 JL	<0.38 JL	<0.37	<0.36	<0.40	<0.39 JL
Benzo(b)fluoranthene	<0.58	<0.58	0.29	27 JH	<0.38 JK	<0.37	<0.36	<0.40	<0.39
Benzo(k)fluoranthene	<0.58	<0.58	<0.43	<4.0 JK	<0.38 JK	<0.37	<0.36	<0.40	<0.39
Benzo(a)pyrene	<0.58	<0.58	<0.43	11 JH	<0.38	<0.37	<0.36	<0.40	<0.39
Benzo(ghi)perylene	<0.58	<0.58	0.24	12 JH	<0.38 JK	<0.37	<0.36	<0.40	<0.39
Chrysene	<0.58	<0.58	1.0	5.4 JH	<0.38 JK	<0.37	<0.36	<0.40	<0.39
Dibenzo(a,h)anthracene	<0.58	<0.58	<0.43	5.4 JH	<0.38 JK	<0.37	<0.36	<0.40	<0.39
Fluoranthene	<0.58	<0.58	<0.43	34	<0.38	<0.37	<0.36	<0.40	<0.39
Fluorene	<0.58	<0.58	<0.43	24	<0.38	<0.37	<0.36	<0.40	<0.39
Indeno(1,2,3-cd)pyrene	<0.58	<0.58	<0.43	11 JH	<0.38 JK	<0.37	<0.36	<0.40	<0.39
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	<0.58	<0.58	<0.43	2.4 JH	<0.38	<0.37 JK	<0.36 JK	<0.40 JK	<0.39 JK
Phenanthrene	<0.58	0.31	0.97	2.3 JH	<0.38	<0.37	<0.36	<0.40	<0.39
Pyrene	<0.58	0.29	1.1	2.3 JH	0.36 JH	<0.37	<0.36	<0.40	<0.39
TPH - mg/kg									
C6 - C10 Hydrocarbons	<87.3	<86.3	<64.3	<64.6	<57.1	<51.3	<53.6	<59.7	<60.0
>C10 - C28 Hydrocarbons	<87.3	<86.3			<57.1	<51.3	<53.6	<59.7	<60.0
TPH C6 - C28 Hydrocarbons	NR	NR	NR	NR	NR	NR	NR	NR	NR

Key at end of table.

Table 4-1 (cont.)

**ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Sample Location Depth (ft)	SB40 3-4	SB41 2-3	SB41D 2-3	SB42 2-3	SB43 6-7	SB44 4-5	SB45 0-1	SB46 6-12	SB46D 6-12
Analyte									
Volatiles (BTX) - mg/kg									
Benzene	<0.0059	<0.0061	<0.0056	<0.0059	<0.0054	<0.0056	<0.0063	<0.0059	<0.0057
Ethylbenzene	<0.0059	<0.0061	<0.0056	<0.0059	<0.0054	<0.0056	<0.0063	<0.0059	<0.0057
Toluene	<0.0059	<0.0061	<0.0056	<0.0059	<0.0054	<0.0056	<0.0063	<0.0059	<0.0057
Xylene (total)	<0.0059	<0.0061	<0.0056	<0.0059	<0.0054	<0.0056	<0.0063	<0.0059	<0.0057
Semi-Volatiles (PAHs) - mg/kg									
Acenaphthene	<0.39 JK	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39 JK	<0.38 JK
Acenaphthylene	<0.39 JK	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39 JK	<0.38 JK
Anthracene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Benzo(a)anthracene	<0.39 JL	<0.41 JL	<0.37 JL	<0.39 JL	<0.36 JL	<0.37 JL	<0.42 JL	<0.39 JL	<0.38 JL
Benzo(b)fluoranthene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Benzo(k)fluoranthene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Benzo(a)pyrene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Benzo(ghi)perylene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Chrysene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Dibenzo(a,h)anthracene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Fluoranthene	<0.39	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Fluorene	<0.39 JK	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39 JK	<0.38 JK
Indeno(1,2,3-cd)pyrene	<0.39	<0.41	<0.37	<0.39	<0.36 JK	<0.37	<0.42	<0.39	<0.38
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	<0.39 JK	<0.41 JK	<0.37 JK	<0.39 JK	<0.36	<0.37 JK	<0.42	<0.39 JK	<0.38 JK
Phenanthrene	0.49 JII	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
Pyrene	0.20 JII	<0.41	<0.37	<0.39	<0.36	<0.37	<0.42	<0.39	<0.38
TPH - mg/kg									
C6 - C10 Hydrocarbons	<58.9	<60.7	<55.7	<58.7	<54.2	<55.1	<62.8	<58.8	<56.8
>C10 - C28 Hydrocarbons	<58.9	<60.7	<55.7	<58.7	<54.2	<55.1	<62.8	<58.8	<56.8
TPH C6 - C28 Hydrocarbons	NR	NR	NR	NR	NR	NR	NR	NR	NR

Key at end of table.

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Table 4-1 (cont.)

ORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA

Key:

Analytical results are reported in milligrams per kilogram (mg/kg)

Results in **bold** exceed laboratory reporting limits

BTEX - Benzene, toluene, ethylbenzene, and xylenes

D - Duplicate sample

H - The bias in the estimated value is high

J - Concentration is estimated

K - The bias in the estimated value is unknown

L - The bias in the estimated value is low

NA - Not analyzed

NR - Not reported

PAHs - Polycyclic aromatic hydrocarbons

SB - Soil boring sample

SED - Sediment sample

TPH - Total petroleum hydrocarbons

< - Not detected at the laboratory reporting limit

>C10-C28 - Number of carbon atoms in the range of
total hydrocarbon concentrations

Shaded results exceed one or more example regulatory criteria in Table 11

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Table 4-2

Key:

Results in bold exceed laboratory reporting limits

Subtotal results exceed 20 times ACRN REF criteria in Table 3-2

pH reported in standard pH units

14. *Asplenium adnigrum* in proximity

(1) - Analyte detected in associated blank

D - Duplicate sample

11 - The bias in the estimated value is high

) - Concentration is estimated

K. The bias in the estimated value is unknown

1. - The bias in the estimated value is low

NA - Not analyzed

NR - Not Reported

NR - Not Reported
 S14 - Soil binning sample

SL1 - Soil Swelling Sample
SL2 - Seismicity Sample

• Not detected at the laboratory reporting limit

INORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL.
WILCOX REFINERY, BRISTOW, OKLAHOMA

Sample Location Depth (ft)	SB09 1-2	SB10 3-4	SB11 2-3	SB12 1-2	SB12 8-9	SB13 1-2	SB13 6.5-7.5	SB13D 6.5-7.5	SB14 1-2	SB14 5-6	SB15 0-1	SB16 5-6	SB17 1-2
Metals - mg/kg													
Aluminum	3,510	2,110	3,600	4,480	1,600	3,600	3,160	2,290	1,780	9,190	24.6	3,370	9,700
Antimony	<1.1	<1.1	<1.2	<1.1	<1.1	<1.1	<1.1	<1.2	<1.1	1.4	<1.2	<1.2	<1.1
Arsenic	2.8	1.3	2.3	3.0	0.88	4.5	3.9	2.4	0.95	5.4	<0.62	1.9	2.7
Barium	27.4	15.1	54.0	77	16.5	23.2	45.4	39.3	23.5	107	<2.5	21.3	60.5
Beryllium	<0.36	<0.33	<0.39	<0.36	<0.36	<0.34	<0.37	<0.38	<0.35	0.81	<0.62	<0.58	<0.34
Cadmium	1.1	0.59	0.99	1.4	<0.56	1.4	1.8	1.1	0.58	2.8	<0.62	0.82	1.5
Calcium	646 J/K	522 J/K	798 J/K	818 J/K	512 J/K	585 J/K	1,016 J/K	786 J/K	264	445	87.3	334	1,470
Chromium	8.3 J/K	6.5 J/K	8.4 J/K	8.6 J/K	4.0 J/K	7.8 J/K	10.3 J/K	7.5 J/K	4.3	15.3	<1.2	6.8	11.2
Cobalt	<2.2	<2.1	2.8	4.1	<2.3	2.6	4.3	3.6	2.3	9.8	<2.5	2.3	2.9
Copper	<2.2	2.2	6.4	4.5	<2.3	2.9	4.7	3.2	<2.2	12.7	<2.5	3.9	6.1
Iron	7,820	4,270	6,770	9,330	1,870	9,930	12,700	8,940	3,810	18,108	262	5,490	10,108
Lead	5.0 J/K	2.0 J/K	20.9 J/K	4.7 J/K	1.7 J/K	48 J/K	5.5 J/K	3.5 J/K	1.1	7.4	2.5	2.6	10.3
Magnesium	318	431	587	624	337	414	763	615	241	1,510	<61.5	279	728
Manganese	103 J/K	43.4 J/K	59.9 J/K	156 J/K	24.0 J/K	25.3 J/K	76.7 J/K	32.0 J/K	86.2	103	3.0	44.2	36
Mercury	0.05	0.04	0.03	0.05	0.05	0.04	0.05	0.05	0.04	0.04	<0.02	0.04	0.04
Nickel	3.3	2.3	3.3	5.6	<2.3	3.2	8.1	6.8	3.1	13.1	<2.5	3.5	5.5
Potassium	466	340	487	567	299	568	306	500	412	1,040	<123	546	1,110
Selenium	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.2	<1.1	<1.2	<1.2	<1.2	<1.1
Silver	<1.1	<1.1	<1.2	<1.1	<1.1	<1.1	<1.1	<1.2	<1.1	<1.2	<1.2	<1.2	<1.1
Sodium	<111	232	<117	254	156	<112	<116	115	1,620 J/K	4,690 J/K	<123 J/K	<115 J/K	<108 J/K
Thallium	<0.36	<0.33	<0.39	<0.36	<0.36	<0.34	<0.37	<0.38	<0.35	<0.60	<0.62	<0.58	0.34
Vanadium	12.6	7.0	12.8	14.5	3.5	13.7	21.4	12.1	5.1	27.7	<2.5	10.4	10
Zinc	5.6 J/K	4.7 J/K	13.3 J/K	8.4 J/K	4.0 J/K	9.2 J/K	10.5 J/K	8.7 J/K	5.8	18.7	<1.2	4.8	15.2
pH	3.0	2.8	4.7	3.8	3.9	3.9	6.0	3.9	9.5	9.4	8.1	6.6	7.4

Metals reported in milligrams per kilogram (mg/kg)
Results in bold exceed laboratory reporting limits
Shaded results exceed 20 times RCRA TCLP criteria
pH results in bold are ≤ 5 or ≥ 9
pH reported in standard pH units
B - Analyte detected in associated blank
D - Duplicate sample
H - The bias in the estimated value is high
J - Concentration is estimated
K - The bias in the estimated value is unknown
L - The bias in the estimated value is low
NA - Not analyzed
NR - Not reported
SB - Soil boring sample
SED - Sediment sample
~ - Not detected at the laboratory reporting limit

Table 4-2 (cont.)

**INORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Sample Location Depth (ft)	SB17D 1-2 1-2	SB17 3.3-6.5 3.3-6.5	SB18 1-1 1-1	SB18 7-8 7-8	SB19 1-2 1-2	SB19 7-8 7-8	SB20 0-3 0-3	SB21 0-3 0-3	SB22 0-3 0-3	SB23 0-3 0-3	SB24 0-2 0-2	SB25 0-3 0-3	SB26 0-2 0-2
Metals - mg/kg													
Aluminum	7,840	4,130	2,510	5,300	1,570	4,110	1,770	1,260	4,290	1,350	1,140	1,280	3,010
Antimony	<1.1	<1.1	<1.1	<1.2	<1.1	<1.1	1.3 R	<0.50 R	1.00 R	<0.50 R	1.1 R	<0.50 R	<0.50 R
Arsenic	1.5	1.7	2.1	3.3	1.5	0.83	2.7 R	2.7 R	2.2 R	1.8 R	2.7 R	2.2 R	1.7 R
Barium	53.9	31.6	50.3	60.1	25.6	33.6	37.3	15.5	50.8	20.9	31.4	16.0	24.8
Beryllium	<0.54	<0.55	<0.56	<0.58	<0.53	<0.57	0.12 R	0.08 R	0.25 R	0.12 R	0.13 R	0.10 R	0.17 R
Cadmium	0.98	1.2	0.79	1.6	0.63	<0.57	0.14 R	0.07 R	0.10 R	0.17 R	0.25 R	0.44 R	0.11 R
Calcium	1,420	342	924	678	1,480	754	594	18,400	471	619	4,190	10,700	898
Chromium	10.5	6.8	6.8	9.4	5.8	8.6	6.1 JK	4.1 JK	6.2 JK	3.5 JK	5.2 JK	4.9 JK	5.4 JK
Cobalt	2.4	2.8	2.6	5.3	2.3	<2.3	1.0 R	1.0 R	3.2 R	1.4 R	2.3 R	1.3 R	1.8 R
Copper	4.9	5.3	6.3	6.1	3.5	3.5	15.7	3.6	7.9	8.4	122	12.9	4.9
Iron	6,400	7,910	5,010	10,300	3,750	2,930	4,800 JK	4,000 JK	5,120 JK	4,960 JK	7,440 JK	6,140 JK	4,180 JK
Lead	6	3.7	24.8	10.7	14.7	1.9	56.1 JK	61.6 JK	4.3 JK	20.1 JK	20.1 JK	34.5 JK	72.2 JK
Magnesium	628	478	351	606	550	785	327	9,910	490	300	2,140	5,890	595
Manganese	37.5	130	128	111	138	34.5	27.1	424	163	127	223	208	99
Mercury	0.03	0.04	0.11	0.05	0.11	0.05	0.29	NR	<0.11	0.13	<0.12	<0.10	<0.10
Nickel	5.0	4.1	3.6	6.3	4.4	2.8	3.9	2.7	4.9	3.3	6.4	4.3	4.4
Potassium	932	551	388	504	286	300	354	475	679	339	356	342	593
Selenium	<1.1	<1.1	<1.1	<1.2	<1.1	<1.1	<0.49	<0.46	0.48	<0.46	<0.53	<0.46	<0.46
Silver	<1.1	<1.1	<1.1	<1.2	<1.1	<1.1	<1.2 B	<1.4 B	<0.99 B	<1.1 B	<1.3 B	<1.5 B	<1.0 B
Sodium	<108 JK	<109 JK	<112 JK	<115 JK	<106 JK	174 JK	67.8	97	57	70	154	192	119
Thallium	<0.54	<0.55	<0.56	<0.58	<0.53	<0.57	<0.27	<0.26	<0.26	<0.26	<0.29	<0.25	<0.26
Vanadium	17.4	10	10.1	16.2	6.6	3.8	6.6 JK	4.9 JK	9.2 JK	5.0 JK	5.7 JK	4.8 JK	6.8 JK
Zinc	10.2	8.4	10	8.2	25.6	3.1	15.4 JK	14.1 JK	6.2 JK	18.3 JK	61.9 JK	83.8 JK	14.3 JK
pH	7.3	5.6	7.7	6.1	7.4	6.3	5.9	7.7	6.2	6.2	7.1	6.9	7.2

Key:

Metals reported in milligrams per kilogram (mg/kg)
 Results in bold exceed laboratory reporting limits
 Shaded results exceed 20 times RCRA TCLP criteria
 pH results in bold are <5 or >9
 pH reported in standard pH units
 D - Analyte detected in associated blank
 D - Depleted sample
 H - The bias in the estimated value is high
 J - Concentration is estimated
 K - The bias in the estimated value is unknown
 L - The bias in the estimated value is low
 NA - Not analyzed
 NR - Not reported
 SB - Soil boring sample
 SED - Sediment sample
 < - Not detected at the laboratory reporting limit

Table 4-2 (cont.)

INORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL
WILCOX REFINERY, BRISTOW, OKLAHOMA

Sample Location Depth (ft)	SB27 0-3	SB28 0-3	SB29 0-1	SB30 0-3	SB31 0-3	SB32 0-1	SB32D 0-1	SB33 0-1	SB34 0-1	SB35 0-3	SB36 6-7	SB37 6-7	SB38 0-1
Metals - mg/kg													
Aluminum	3220 JK	2,240 JK	1,460 JK	2,350 JK	2,190 JK	2,090 JK	1,870 JK	11,300 JK	3,410 JK	4,180 JK	1,290	915	44.6
Antimony	<0.51 JL	0.76 JL	0.80 JL	<0.55 JL	<0.58 JL	<0.86 JL	<0.85 JL	<0.63 JL	<0.63 JL	<0.56 JL	<0.50 R	<0.53 R	<0.01 R
Arsenic	2.3	3.0	1.4	1.2	0.73	8.3	11.4	4.0	3.5	1.0	1.0 R	0.45 R	0.01 R
Barium	51.8	42.6	21.9	32.7	28.7	84.6	104	171	53.0	36.7	10.9	9.4	0.28
Beryllium	0.21	0.28	0.11	0.19	0.15	0.12	0.14	0.73	0.23	0.20	0.09 R	0.05 R	0 R
Cadmium	0.19	0.20	0.10	0.12	0.07	0.15	0.15	0.13	0.08	0.24	<0.05 R	<0.05 R	<0 R
Calcium	3,460	951	1,560	818	321	1,370	1,630	1,110	717	6,590	211	148	3.9
Chromium	6.1	15.0	3.5	4.6	3.8	3.9	3.6	14.1	6.7	4.5	3.3 JK	1.6 JK	0.06 JK
Cobalt	2.5	3.0	1.6	2.2	2.0	3.8	3.0	3.1	3.9	1.3	1.1 R	0.29 R	<0.01 B R
Copper	8.1	7.3	4.5	4.5	19.0	4.0	3.8	3.8	11.7	8.9	2	<1.5 B	<0.03 B
Iron	5,310	8,630	2,690	3,910	3,180	25,300	31,500	14,600	8,990	4,260	2,370 JK	769 JK	31.7 JK
Lead	14.41	14.50	162	77.2	111	111	145	15.3	10.4	11.70	<1.2 BJK	<2.8 BJK	<0.04 BJK
Magnesium	1,890	443	796	401	271	392	421	1,580	628	2,120	201	151	6.2
Manganese	176 JL	213 JL	157 JL	338 JL	78.7 JL	921 JL	1,100 JL	179 JL	301 JL	87.4 JL	50.9	4.1	0.23
Mercury	<0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.11	<0.12
Nickel	4.9	3.9	2.4	2.0	3.2	8.94	<0.52	10.7	5.1	3.1	18.3	1.9	<0.05 JL
Potassium	704 JK	143 JK	168 JK	472 JK	564 JK	691 JK	218 JK	3,810 JK	764 JK	495 JK	350	360	9.1
Selenium	<0.47	<0.47	<0.40	<0.51	<0.53	<0.79	<0.78	<0.58	<0.58	<0.51	<0.46	<0.48	<0.01
Silver	0.59	<0.13	<0.12	0.20	0.35	2.3	2.0	<0.15	0.88	0.37	1.0	<1.7 B	<0.01 B
Sodium	142	90	71	86.6	98.5	202	112	190	199	143	53.2	55.6	<0.65 B
Thallium	<0.26	<0.26	<0.26	<0.28	<0.30	<0.44	<0.43	<0.32	<0.32	<0.29	<0.26	<0.27	NR
Vanadium	9.1	9.2	4.2	7.2	6.6	6.1	8.7	24.9	10.1	6.1	4.2	2.6 JK	<0.11 B JK
Zinc	29.6	29.6	13.7	22.3	12.2	7.7	8.0	19.4	14.7	7.6	4	0.75 JK	0.06 JK
pH	7.1	6.1	6.3	6.2	6.3	5.4	6.7	5.3	5.2	5.1	6.4	6.4	6.3

Key:

Metals reported in milligrams per kilogram (mg/kg)

Results in bold exceed laboratory reporting limits

Shaded results exceed 20 times RCRA TCLP criteria

pH results in bold are <5 or >9

pH reported in standard pH units

B - Analyte detected in associated blank

D - Duplicate sample

H - The bias in the estimated value is high

J - Concentration is estimated

K - The bias in the estimated value is unknown

L - The bias in the estimated value is low

NA - Not analyzed

NR - Not reported

SB - Soil boring sample

SED - Sediment sample

< - Not detected at the laboratory reporting limit

Table 4-2 (cont.)

INORGANIC ANALYTICAL RESULTS IN SEDIMENT AND SOIL,
WILCOX REFINERY, BRISTOW, OKLAHOMA

Sample Location Depth (ft)	SB39 3-4	SB40 3-4	SB41 2-3	SB41D 2-3	SB42 2-3	SB43 6-7	SB44 4-5	SB45 0-1	SB46 6-12	SB46D 6-12
Metals - mg/kg										
Aluminum	4,570 JK	3,020 JK	2,760 JK	1,800 JK	2,180 JK	2,410 JK	1,420 JK	2,660 JK	5,640 JK	26.4 JK
Antimony	<0.59 JL	<0.58 JL	<0.60 JL	<0.55 JL	<0.58 JL	<0.53 JL	<0.54 JL	<0.62 JL	<0.58 JL	<0.01 JL
Arsenic	3	5.7	1.5	1.1	4.2	1.6	0.73	2.2	3	0.01
Boron	27.2	48.4	33.1	15.5	22.6	28.0	14.3	27.1	43.7	0.42
Beryllium	0.36	0.29	0.24	0.12	0.25	0.21	0.11	0.19	0.39	NR
Cadmium	<0.06	0.06	<0.06	<0.06	<0.06	0.07	<0.06	<0.06	0.06	NR
Calcium	646	528	536	324	333	292	199	289	463	2.1
Chromium	8.4	5.6	4.6	3.7	6.4	5.4	3	4.5	7.6	0.04
Cobalt	3.2	3.2	2.7	1.3	2.4	2.1	0.95	2	3	0.02
Copper	3.1	2.2	3.3	1.1	2.7	2	4.1	3.8	5.7	<0.03 B
Iron	8,820	10,400	5,250	3,260	8,180	5,990	2,430	5,830	9,260	26.3
Lead	3.6	3.2	6.6	3.8	4.4	2.3	<1.6 B	38.9	1,442	<1.8 B
Magnesium	653	483	476	271	370	369	215	483	688	3.6
Manganese	60.9 JL	312 JL	40.0 JL	45.1 JL	114 JL	84.4 JL	32.4 JL	39.5 JL	95.7 JL	0.16 JL
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	6.9	4.3	5.6	3.2	3.9	12.5	7.8	4.5	9.1	0.05
Potassium	917 JK	514 JK	501 JK	569 JK	547 JK	387 JK	311 JK	700 JK	894 JK	5.9 JK
Selenium	<0.54	<0.53	<0.55	<0.5	<0.53	<0.49	<0.5	<0.57	<0.53	<0.01
Silver	0.19	0.47	0.35	0.71	0.91	0.13	0.5	0.82	0.67	<0.01 JL
Sodium	63.3	68.9	76.1	105	129	41.1	61.7	123	573	4.3
Thallium	<0.3	<0.29	<0.3	<0.28	<0.29	<0.27	<0.28	<0.31	<0.29	NR
Vanadium	13.6	10.3	8.5	5.5	11.3	8.5	4	7.2	16.2	0.05
Zinc	6.2	4.1	5.8	4	4	4.1	3.4	8	6.7	0.04 B
pH	5.7	5.3	4.9	4.6	4.8	5.2	5.1	4.4	6.2	6.0

Key

Metals reported in milligrams per kilogram (mg/kg)

Results in bold exceed laboratory reporting limits

Shaded results exceed 20 times RCRA TCI P criteria

pH results in bold are <5 or >9

pH reported in standard pH units

B - Analyte detected in associated blank

D - Duplicate sample

H - The bias in the estimated value is high

J - Concentration is estimated

K - The bias in the estimated value is unknown

L - The bias in the estimated value is low

NA - Not analyzed

NR - Not reported

Slt - Soil being sample

SEI - Sediment sample

- - Not detected at the laboratory reporting limit

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Table 4-3									
ORGANIC ANALYTICAL RESULTS IN GROUND WATER WILCOX REFINERY, BRISTOW, OKLAHOMA									
Sample ID/Location	GW1(SB05)	GW2(SB13)	GW3(SB15)	GW3D(SB15)	GW4(SB17)	GW5(SB18)	GW6(SB40)	GW7(SB42)	GW8(SB37)
Analyte									
Volatiles (BTEX) - mg/L									
Benzene	<2.0	<0.05	0.049 JL	0.012	<0.05		<0.005	<0.005	<0.005
Toluene	<2.0	<0.05	0.034 JL	0.0087	<0.05	<2.0	<0.005	<0.005	<0.005
Ethylbenzene	0.19	0.21	0.011 JL	0.0083	0.49	3.3	<0.005	<0.005	<0.005
Xylene (total)	0.035	<0.05	0.064 JL	0.018	0.14	9.1	<0.005	<0.005	<0.005
TPH - mg/L									
C6 - C10 Hydrocarbons	100	140	<5.0	<5.0			<5.0	<5.0	NA
>C10 - C28 Hydrocarbons	20	530	10	13	<100	5,900	<5.0	<5.0	NA
TPH C6 - C28 Hydrocarbons	120	680	10	13			NR	NR	NA

Key:

Analytical results are reported in milligrams per liter
 Results in **bold** exceed laboratory reporting limits
 Shaded results exceed one or more example regulatory criteria in Table 5-1
 BTEX - Benzene, toluene, ethylbenzene, and xylenes
 D - Duplicate sample
 GW(SB) - Ground water sample number (Soil boring location)
 J - Concentration is estimated
 L - The bias in the estimated value is low
 NA - Not analyzed
 NR - Not reported
 >C10 - C28 - Number of carbon atoms in the range of totaled hydrocarbons
 < - Not detected at the laboratory reporting limit

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Table 4-4		
SUMMARY OF DATA COMPLETENESS WILCOX REFINERY, BRISTOW, OKLAHOMA		
Control Limits	Data Assessment	
Analyte >90%	TPH in water	87.5%
	Antimony	82.5%
	Arsenic	82.5%
	Beryllium	81%
	Cadmium	81%
	Cobalt	82.5%
	Mercury	98%
	Thallium	96.5%
Analytical Method >90%	BTEX	100%
	PAHs	100%
	TPH	98.5%
	Metals	96%

Key:

Completeness results in **bold** for individual analytes fail analytical method completeness goals.

BTEX - Benzene, toluene, ethylbenzene, and xylenes.
 PAHs - Polycyclic aromatic hydrocarbons.
 TPH - Total petroleum hydrocarbons.

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Table 4-5

SOURCE INVENTORY AND PRELIMINARY ESTIMATES OF WASTE QUANTITY
WILCOX REFINERY, BRISTOW, OKLAHOMA

Source	Concern/Status	Level of Threat to Waters	Capacity/Dimension	Source Area (ft ²)	Estimated Thickness of Contamination (ft or inches)	Estimated Waste Volume (yd ³)	COCs (ESI and EPA START)*
Pond 1	Oily sludge/backfilled	Low	250 ft x 100 ft 3 cells	25,000	3 ft of oily waste and soil (Avg. of SB02, 03, 04)	2,780	Pyrene, toluene, xylenes, TPH
Pond 2	Runoff sediment from pit area 1 cell breached, 1 cell ponded	High	225 ft x 150 ft 1 of 2 cells	33,750	12 ft of soil and sediment	15,000	Copper, lead, TPH
Oily Waste Pit	Oily sludge/born breached, backfilled	Medium	300 ft diameter	70,686	3 ft of oily waste and soil (Avg. of SB07, 08, 09)	7,854	Acetone, 2-methyl-naphthalene, phenanthrene, xylenes, arsenic, copper, TPH
Lee's Pond	Stained sediment/stock watering pond	High	100 ft x 60 ft	6,000	3 ft of sediment	667	Chromium, copper, lead
Ten Former Tank Farm Large ASTs	Tank bottom sludge/tank steel salvaged prior to 1967	Medium to low	55,000 bbl ea. 125 ft dia. x 25 ft.	12,272 each	2 inches of semi-solid TBS	76 ea. 760 total	Pyrene, cyanide, manganese, selenium, silver, zinc, TPH
White Residence Soil	Surface and subsurface soil/on-site residents	Low	200 ft x 175 ft lot (-25% for house and shed)	26,250	5 ft average depth to ground water (SB17)	4,860	Lead, mercury, zinc, benzo(g,h,i)perylene, chrysene, phenanthrene, pyrene
Unvegetated Area (South end of White Property)	Bare, stained surface soil, odor/unchanged	High	200 ft x 150 ft	30,000	5 ft average depth to ground water (SB14)	5,556	Copper, lead, acidity

Key at end of table.

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Table 4-5 (Cont.)

**SOURCE INVENTORY AND PRELIMINARY ESTIMATES OF WASTE QUANTITY
WILCOX REFINERY, BRISTOW, OKLAHOMA**

Source	Concern/Status	Level of Threat to Waters	Capacity/Dimension	Source Area (ft ²)	Estimated Thickness of Contamination (ft or inches)	Estimated Waste Volume (yd ³)	COCs (ESI or EPA START)*
Lee Residence Former Ponds	Subsurface soil/backfilled, on-site residents	Medium	150 ft x 100 ft (house pond) 300 ft x 100 ft (South pond)	15,000 30,000	8 ft to ground water (SB13)	4,444 <u>8,889</u> Total 13,333	Acetone, TPH
Former Pond (White Property at SB01)	Bare cinders at surface/oily subsurface soil	High	125 ft x 100 ft	12,500	10 ft average to rock (SB01)	4,630	BTEX, TPH, lead
Former Pumping Station Soil	Subsurface soil/ No surface sampling to date	Medium	250 ft x 200 ft (fenced area) [25% impacted]	12,500	8 ft average depth to ground water (SB18)	3,704	Benzene, TPH
Former Refinery Area Soil	Surface soil/ No sampling to date	Medium	Unknown	Unknown	Unknown	Unknown	Suspected BTEX, PAHs, metals, TPH
Large ASTs (White Property)	Minor TBS, Stained soil/Existing ASTs	Low	3,400 bbl each 144,000 gal 35 ft dia. X 20 ft	1,000 (Soil) plus 962 (TBS)	8 ft to rock (SB19) plus 2 inches of TBS in 1 tank	300 plus 1,200 gal	TPH
Small AST (White Property)	Diesel/Fuel Oil/ Existing AST	Medium	560 bbl 23,500 gal 20 ft dia. X 10 ft	10,000 (Soil) plus 314 (TBS)	4 ft to ground water (SB16), 9 inches of TBS	1,480 plus 1,760 gal	TPH
Rail Tanker	Minor spills of fuel oil/active AST	Medium	20,000 gal	100	3 inches of stained soil	1	Fuel oil
South Central Tank Berm Area	Stained soil/ Backfilled former AST berm area	Medium	300 ft dia. (25% impacted)	17,670	15 ft to ground water (SB05)	9,817	TPH
Lee's Tank Berm Area	Oily near surface soil/berm breached, backfilled	Medium	300 ft dia. (25% impacted)	17,670	3 ft to rock (SB11)	1,963	Benzo(a)pyrene, TPH

Key at end of table.

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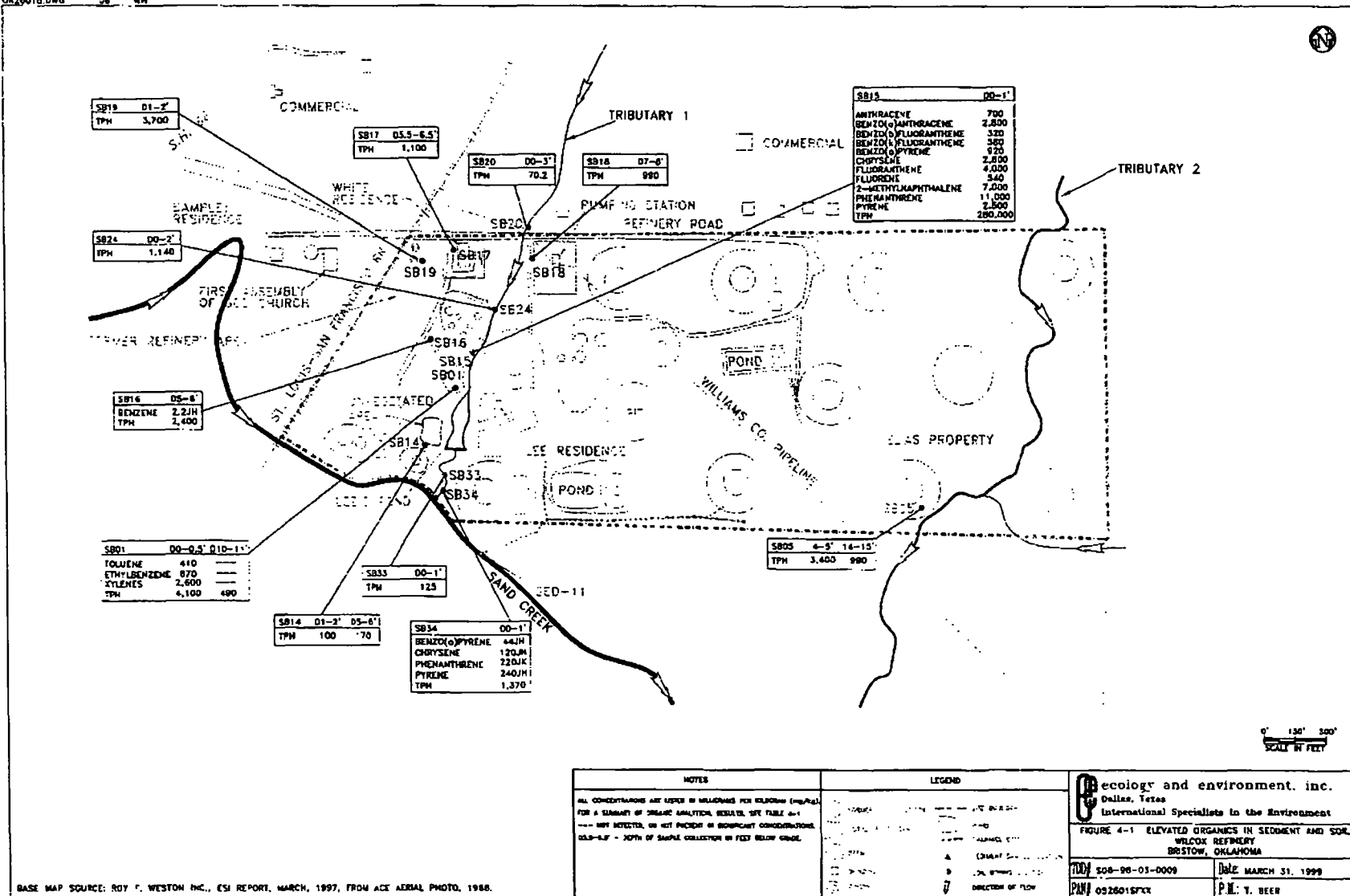
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Table 4-5 (Cont.)							
SOURCE INVENTORY AND PRELIMINARY ESTIMATES OF WASTE QUANTITY WILCOX REFINERY, BRISTOW, OKLAHOMA							
Source	Concern/Status	Level of Threat to Waters	Capacity/Dimension	Source Area (ft ²)	Estimated Thickness of Contamination (ft or inches)	Estimated Waste Volume (yd ³)	COCs (ESI or EPA START)*
Former o/w Separator (White Property)	Oily soil, larry waste/separator breached	High	33 ft x 15 ft (Soil)	500	1 ft to ground water (SB15)	18.5	Benzo(a)pyrene, PAHs, TPH
			30 ft x 10 ft (Tar)	300	6 inches average of tar	5.5 Total 24	
Upper reaches of Tributary 1	Stream bed soil/sed	High	800 ft of impacted stream bed	2,400	1 ft soil/sed (SB20 to SB29)	89	Lead, TPH
Lower reaches of Tributary 1	Oily liquid flowing into stream	High	250 ft of impacted stream bed	Unknown (pipe from White's property)	2 ft soil/sed (SB33, 34)	167 soil/sed plus unknown gal/min	PAHs, lead, TPH
Total						72,985 yd ³ plus >2,960 gal	Solid Waste Liquid Waste

Key:

*Expanded Site Inspection (ESI) report (Roy F. Weston, March 1997) and the U.S. Environmental Protection Agency Superfund Technical Assistance and Response Team (START) site sampling events (Ecology and Environment, Inc., April, June, August, 1998).

AST - Aboveground storage tank
 bbl - Barrel
 BTEX - Benzene, toluene, ethylbenzene, and xylenes
 COCs - Contaminants of concern
 dia. - Diameter
 ft - Feet
 ft² - Square feet
 gal - Gallons
 > - Greater than
 min - Minute
 O/W - Oil/water
 PAHs - Polycyclic aromatic hydrocarbons
 sed - Sediment
 SB - Soil boring sample
 TBS - Tank bottom sludge
 TPH - Total petroleum hydrocarbons
 yd³ - Cubic yard

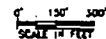






<p>NOTES</p> <p>ALL CONCENTRATIONS ARE LISTED IN MILLIGRAMS PER KILOGRAM (mg/kg) FOR A SUMMARY OF RELEVANT ANALYTICAL RESULTS. SEE TABLE 4-1.</p> <p>0.05-L - DEPTH OF SAMPLE COLLECTION IS FIFTY BELOW SURFACE.</p> <p>(JAW) - UNPUBLISHED RESULT.</p>	<p>LEGEND</p> <p>THAT THIS LOCATION WAS NOT TESTED.</p> <p>UNTESTED AREA.</p> <p>WATERWAY WITHIN PROPERTY.</p> <p>EXISTING ELEVATION.</p> <p>SECTION OF ROAD.</p>	<p>E Ecology and environment, inc. Dallas, Texas International Specialists in the Environment</p> <hr/> <p>FIGURE 4-2 ELEVATED INORGANICS IN SEDIMENT AND SOIL NEAR THE TANKS BROSTON, OKLAHOMA</p> <hr/> <p>JUNE 308-98-03-0009 Date MARCH 31, 1999</p> <p>PAGE 032601SF/KK P.M.: 1. RTR</p>
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BASE MAP SOURCE: ROY F. WESTON INC., ESI REPORT, MARCH, 1987, FROM ACE AERIAL PHOTO, 1986.

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NOTES	LEGEND	 ecology and environment, inc. Dallas, Texas International Specialists in the Environment
ALL CONCENTRATIONS ARE LISTED IN MILLIGRAMS PER LITER (mg/L) FOR A SUMMARY OF GROUND WATER RESULTS. SEE TABLE 4-3. DEPT - DEPTH OF SAMPLE COLLECTION IN FEET BELOW GROUND. NA - NOT ANALYZED ND - NOT DETECTED PRESENT - QUANTIFIED BELOW THE DETECTION LIMIT. BTEX - BENZENE, TOLUENE, CHLOROBENZENE AND XYLENES IPA - AROMATIC PETROLEUM HYDROCARBONS	 GW1 SCREENED WATER SAMPLE 10 FEET DEPTH DIRECTION OF FLOW	
		FIGURE 4-3 BTEX AND IPA IN GROUND WATER WELDON RECOVERY BRISTOW, OKLAHOMA
		MW-506-98-03-0009 Date: March 31, 1999 Pch# 05280-15FXK P.W.: T. REER

The NCP spill response program addresses only imminent and substantial threats to navigable waters of the United States. Risk assessment and long-term human health or ecological risks from documented site contamination are beyond the scope of this program. Threat to navigable waters at the Wilcox refinery site is determined by comparing site chemical data with Applicable or Relevant and Appropriate Requirements (ARARs) and To Be Considered materials (TBCs).

ARARs refer to federal or state laws and environmental protection requirements that are legally applicable to the investigation site. TBCs are non-promulgated advisories or guidance for the protection of human health and the environment that are generally not enforceable. The potential regulatory requirements for the site include federal environmental laws administered by the U.S. EPA and other federal agencies, and laws administered by the State of Oklahoma. ARARs and TBCs are typically categorized as chemical-, location-, or action-specific criteria. Chemical-specific criteria are usually health- or risk-based values that establish the acceptable concentration of a chemical for each medium. Location-specific requirements are restrictions placed upon the presence of a hazardous substance or the conduct of activities based solely on site location. Action-specific requirements are technology- or activity-based restrictions placed on remedial actions. Only chemical-specific ARARs and TBCs are discussed below due to the preliminary nature of this investigation.

This section presents a qualitative evaluation of the significance of site data by comparing numerical criteria from chemical-specific ARARs and TBCs identified for the site to maximum detected concentrations in the media tested at the Wilcox site.

5.1 Regulatory Criteria

To date, no ARARs have been identified for the site. The TBCs identified for the site are from the Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics in the Code of Federal Regulations (CFR) Title 40, Part 261 (40 CFR 261); RCRA Land Disposal Restrictions (LDRs) (40 CFR 268); Oklahoma Corporation Commission (OCC) Underground Storage Tank (UST) Program; and TNRCC Risk Reduction Standards (RRS) in the Texas Administrative Code (TAC), Chapter 35, Subchapter S, Section 335. Site-specific analytical data for all analytes detected in site media were compared to the identified TBCs as applicable for each medium. TBCs for organic compounds are listed in Table 5-1 and TBCs for inorganic analytes are in Table 5-2.

According to RCRA in 40 CFR 261, Subpart C, four characteristics can be used to determine if a waste is hazardous: ignitability, corrosivity, reactivity, and toxicity. The characteristics most applicable for the evaluation of site data at Wilcox are toxicity for metals data and corrosivity for pH data. Toxicity is determined by analysis for hazardous constituents in an extract or leachate of the waste using the toxicity characteristic leaching procedure (TCLP) (40 CFR 261, Subpart C, Appendix II). The concentration of detected total metals results in site samples that can be compared to 20 times their respective TCLP criteria for an evaluation of hazard. The factor of "20 times TCLP criteria" is based on the extraction methodology of the TCLP. The weight of extract fluid used is 20 times the weight of sample. If it is assumed that the metal of concern can be completely extracted from the waste sample, an extremely conservative assumption, the metal concentration in the leachate cannot be greater than one-twentieth the metal concentration in the solid sample. Thus, total metals data can be classified as not of concern if it is less than the TBC factor of 20 times TCLP criteria (Table 5-2). RCRA hazardous corrosivity criteria are exceeded if pH is less than or equal to 2, or greater than or equal to 12.5 (Table 5-2).

RCRA LDRs are treatment standards for the allowable land disposal of restricted wastes. The listed constituent concentrations may not be exceeded in the waste or treatment residuals. RCRA LDRs are considered TBCs at Wilcox refinery for an initial evaluation of on-site treatment requirements (Table 5-1). The State of Oklahoma OCC UST Program has levels of chemical constituent concentrations that confirm a release to native soils and/or ground water. The OCC UST program release concentrations and corrective action levels are considered TBCs at Wilcox for BTEX compounds and TPH (Table 5-1).

Several TNRCC RRSs are identified as TBCs: the soil/air and ingestion standard for residential use (SAI-Res), the ground water protection standard for residential use (GWP-Res), and ground water standards.

- SAI-Res is the concentration in residential soil that is protective of human health considering cross-media contamination of air, and human ingestion and inhalation pathways from contaminated surface and subsurface soil;
- GWP-Res is the concentration in residential soil assumed protective of ground water considering cross-media contamination of ground water from contaminated subsurface soil; and
- Ground water standards are the allowable concentrations of a contaminant in ground water for residential exposure conditions.

As required by the RRS, the Federal Primary Drinking Water Regulations, Code of Federal Regulations (CFR) 141, Maximum Contaminant Levels (MCLs) should be used to evaluate ground water contamination. For the constituents detected at this site, the ground water standards are the same as the MCLs. Additionally, as allowed by the RRSs, other criteria can be used to evaluate constituents that may present an objectionable characteristic (e.g., bad taste and odor) or can make a natural resource unfit for use.

The following sections discuss the site-specific analytical data and TBCs for 1) oily waste and surface soil (less than 1 foot bgs) from the ESI, and 2) subsurface soil (more than 1 foot bgs), ground water, and surface water from the START field investigation. The maximum concentrations detected at Wilcox refinery are compared to the identified chemical-specific TBCs.

5.1.1 Oily Waste and Surface Soil

Analyte concentrations detected in oily waste and surface soil samples collected during the ESI (Table 2-2) were compared to RCRA LDRs or a factor of 20 times TCLP criteria; Oklahoma UST action and cleanup levels, and the TNRCC GWP-Res and SAI-Res standards (Tables 5-1 and 5-2). TBC values were available for six of the eight organic analytes detected significantly above background concentrations in oily waste or surface soil. Phenanthrene, pyrene, and TPH were detected in oily waste at concentrations exceeding one or more of their respective TBC values (Table 2-2). No organic analytes detected in surface soil exceed any of their respective TBC values.

TBC values were available for eight of the 16 metals and cyanide detected significantly above background concentrations in oily waste and surface soil: antimony, arsenic, barium, beryllium, lead, mercury, selenium, and silver. Unlike metals such as magnesium and iron,

which are essential nutrients at low levels, these eight metals can be toxic at low levels. Of the heavy metals, antimony, arsenic, beryllium, and lead were detected in oily waste at concentrations exceeding one or more of their respective TBC values. Lead was detected in surface soil at concentrations exceeding one or more identified TBC values (Table 2-2).

5.1.2 Subsurface Soil

Analyte concentrations detected in subsurface soil samples collected by START for this investigation were compared to RCRA LDRs, Oklahoma UST action and cleanup levels, and the TNRCC GWP-Res and SAI-Res standards (Table 5-1).

Wastes related to the petroleum refining industry have land disposal restriction TBCs for treatment residuals with specific constituents. RCRA LDRs exist for 11 of the 22 organic analytes detected, including TPH. The following nine compounds exceeded RCRA LDRs for refinery waste: ethylbenzene, toluene, xylenes, anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, phenanthrene, and pyrene.

The OCC has action and cleanup levels for BTEX compounds and TPH in soil at UST sites. Maximum site concentrations of all BTEX and TPH constituents at Wilcox refinery exceed one or both OCC standards.

Pre-calculated GWP-Res and SAI-Res values exist for 11 of the 22 organic analytes detected, not including TPH (Table 5-1). Of these 11 compounds, only benzene was detected in subsurface soil at a concentration exceeding both RRSs. Ethylbenzene, toluene, xylenes, fluoranthene, fluorene, and pyrene were detected at concentrations exceeding their GWP-Res values.

RCRA TCLP criteria exist for seven of the 21 metals detected in subsurface soil at Wilcox refinery. Potentially hazardous concentrations exceeding 20 times TCLP criteria were only detected for lead. For presentation purposes, exceedances of any TBC and total metals results that exceed 20 times TCLP criteria are highlighted in Table 5-2.

Pre-calculated GWP-Res and SAI-Res standards exist for 11 of the 23 metals detected in subsurface soil samples: antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, and silver (Table 5-2). Three of these metals (arsenic, beryllium, and lead) were detected at concentrations exceeding both RRSs. In summary, the contaminants in subsurface soil include all BTEX compounds and TPH, eight PAHs (anthracene, benzo(a)anthracene, benzo(a)pyrene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene), and eight metals but most significantly lead.

5.1.3 Ground Water

Organic analyte concentrations detected in ground water samples were compared to Texas RRSs, maximum concentrations in ground water for residential exposure, and soil TBCs (Table 5-1). Texas RRSs for ground water only exist for benzene, ethylbenzene, and toluene, and maximum site concentrations for benzene and toluene exceed these TBCs. The maximum benzene concentration in ground water also exceeds most soil TBCs. Metals were not analyzed in water samples at Wilcox refinery.

5.2 Contaminants of Concern

Based on their presence at concentrations exceeding one or more identified TBCs, the contaminants of concern (COCs) associated with various media at the Wilcox refinery site are:

- ESI oily waste: phenanthrene, pyrene, TPH, antimony, arsenic, beryllium, and lead (Weston 1997);
- ESI surface soil: lead (Weston 1997);
- Sediment: none;
- Subsurface soil: benzene, ethylbenzene, toluene, xylenes, anthracene, benzo(a)-anthracene, benzo(a)pyrene, chrysene, fluoranthene, fluorene, phenanthrene, pyrene, gasoline, TPH, antimony, arsenic, beryllium, cadmium, chromium, lead, mercury, and nickel;
- Ground water: benzene and toluene, and in addition TPH presents an objectionable taste and odor making shallow ground water at the site unfit for use; and
- Surface Water: none.

Table 5-1							
EXAMPLE REGULATORY CRITERIA TO BE CONSIDERED MATERIALS, ORGANICS WILCOX REFINERY, BRISTOW, OKLAHOMA							
Analyte	Site Max. ¹		RCRA ² I.DRs (mg/kg)	Oklahoma UST ³ Action Level (ppm)	Oklahoma UST ⁴ Cleanup Level 2 (ppm)	Texas RRS ⁵ GWP-Res (mg/kg)	Texas RRS ⁶ SAI-Res (mg/kg)
	Soil (mg/kg)	Water (mg/L)					
Volatiles							
Benzene	2,310 ⁷	8.9 (0.005) ⁷	14	0.5	5	0.5	1.33
Ethylbenzene	670	0.087 (0.7) ⁷	14	15	150	70	11,400
Toluene	410	3.3 (1.0) ⁷	14	40	400	100	3,580
Xylenes	2,600	9.1 (...) ⁷	22	200	1,000	1,000	54,700
Semi-Volatiles							
Acenaphthene	0.78	--	--	--	--	219	13,400
Acenaphthylene	<2,500	--	--	--	--	--	--
Anthracene	700	--	28	--	--	1,100	59,100
Benzo(a)anthracene	2,800	--	20	--	--	--	--
Benzo(b)fluoranthene	320	--	--	--	--	--	--
Benzo(k)fluoranthene	580	--	--	--	--	--	--
Benzo(a)pyrene	920	--	12	--	--	--	--
Benzo(ghi)perylene	<620	--	--	--	--	--	--
Chrysene	2,800	--	15	--	--	--	--
Dibenz(ah)anthracene	<620	--	--	--	--	--	--

Key at end of table.

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Table S-1 (Cont.)							
EXAMPLE REGULATORY CRITERIA TO BE CONSIDERED MATERIALS, ORGANICS WILCOX REFINERY, BRISTOW, OKLAHOMA							
Analyte	Site Max. ¹		RCRA ³ LDRs (mg/kg)	Oklahoma UST ³ Action Level (ppm)	Oklahoma UST ⁴ Cleanup Level 2 (ppm)	Texas RRSs ⁵ GWP-Res. (mg/kg)	Texas RRSs ⁶ SAI-Res. (mg/kg)
	Soil (mg/kg)	Water (mg/L)					
Semi-Volatiles (Cont'd)							
Fluoranthene	4,000	--	--	--	--	146	11,000
Fluorene	540	--	--	--	--	146	9,600
Indeno(1,2,3-cd)pyrene	<250	--	--	--	--	--	--
1-Methylnaphthalene	17	--	--	--	--	--	--
2-Methylnaphthalene	7,000	--	--	--	--	--	--
Naphthalene	<2,500	--	42	--	--	146	4,910
Phenanthrene	11,000	--	34	--	--	--	--
Pyrene	2,500	--	36	--	--	110	8,020
Hydrocarbons							
Gasoline (C6-C10)	8,600	3,300 (-) ⁷	--	--	250 ⁸	--	--
TPH (C6-C28)	280,000	9,200 (-) ⁷	--	50	500	--	--

Key at end of table.

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Table 5-1 (Cont.)

Key:

Blank spaces denote no data or no standards available

Shaded and bold results exceed one or more TBCs

- 1 - Maximum site concentration in soil and water
- 2 - Resource Conservation and Recovery Act (RCRA) land disposal restrictions (LDRs), 40 CFR 268.43
- 3 - Oklahoma Corporation Commission (OCC), Underground Storage Tank (UST) Program
- 4 - OCC UST Cleanup Level 2
- 5 - Texas Risk Reduction Standard (RRS), Ground Water Protection (GWP) for Residential Use
- 6 - Texas RRS Soil/Air and Ingestion (SAI) Standard for Residential Use, TAC 335.568
- 7 - Texas RRS Ground Water (GW), maximum concentration in GW for residential exposure conditions
- 8 - State of Washington, Class 3 soil suitable for disposal on site

mg/kg - Milligrams per kilogram

mg/L - Milligrams per liter

ppm - Parts per million

TPH - Total petroleum hydrocarbons

Table 5-2				
EXAMPLE REGULATORY CRITERIA TO BE CONSIDERED MATERIALS, INORGANICS WILCOX REFINERY, BRISTOW, OKLAHOMA				
Analyte	Site Max. ¹ Soil (mg/kg)	RCRA ² 20 x TCLP (ppm)	Texas RRSs ³ GWP-Res (mg/kg)	Texas RRSs ⁴ SAI-Res (mg/kg)
Metals				
Aluminum	11,300			
Antimony	1.4		0.6	110
Arsenic	11.4	100	5	0.366
Barium	171		200	19,100
Beryllium	0.81		0.4	0.149
Cadmium	2.8	20	0.5	137
Calcium	18,400			
Chromium	15.2	100	10	391
Cobalt	9.8			
Copper	122			
Iron	37,300 JK			
Lead	15,200	100	1.5	500
Magnesium	9,910			
Manganese	1,100 JL			
Mercury	0.39	4.0	0.2	82.3
Nickel	18.3		10	1,560
Potassium	1,820 JK			
Selenium	1.1	20	5	1,370
Silver	2.3	100	18.3	1,370
Sodium	4,690 JK			
Thallium	0.54			
Vanadium	27.7			
Zinc	83.8 JK			
pH	2.3 to 9.5	<2 or >12 ⁵		

Key on next page.

Table 5-2 (Cont.)

Key:

Results that are shaded and bold exceed one or more TBCs
Blank spaces denote no data or no standards available

- 1 - Maximum site concentration in soil
- 2 - Derived criteria for solid waste from 20 times RCRA Toxicity Characteristic Leaching Procedure (TCLP), 40 CFR 261.24
- 3 - Texas Risk Reduction Standard (RRS), Groundwater Protection for Residential Use, TAC 335.568
- 4 - Texas RRS, Soil/Air and Ingestion (SAI) Standard for Residential Use, TAC 335.568
- 5 - RCRA hazardous waste criteria for corrosivity, 40 CFR 261.22

mg/kg - Milligrams per kilogram
ppm - Parts per million

The objectives of the site assessment under the NCP were to document the extent of spill impacts, determine threat to navigable waters of the United States, and evaluate the necessity for removal action. The following findings are based on site activities conducted by START in 1998, and on the evaluation of analytical data from this investigation and from the previous ESI (Weston 1997):

1. The Wilcox refinery site is a former oil refinery and tank farm of approximately 98 acres located to the northeast of Bristow, in Creek County, Oklahoma. The refinery and associated tank farm operated from the 1920s until the 1960s, when the site was abandoned and most steel structures were salvaged and removed. The site is also bordered to the northwest and west by former refinery and tank farm sites. Currently, the site has four owners: Phil Elias (79-acre tank farm), Jack and Arthur White (18-acre former refinery), Mr. and Mrs. Olen Lee (3.6-acre lot), and Sun Oil Company (1.1-acre active pipeline ROW and former pumping station area).
2. The Wilcox site has a number of refinery waste source areas of concern including: a backfilled oily waste pond (Pond 1); a breached settlement pond (Pond 2); a backfilled "oily waste pit"; an unvegetated former pond apparently backfilled with solid refinery waste; two backfilled ponds on the Lee property; ten former large aboveground storage tank bermed areas affected by minor tank bottom sludge; numerous areas of affected soil on the refinery area and former pumping station; and solid and liquid tarry waste that has directly affected the lower reaches of Tributary 1.
3. EPA completed a Site Identification form on June 7, 1994, and ODEQ completed a PA for the Wilcox site and the adjacent refinery and tank farm sites on December 15, 1994. An ESI was completed by Weston for the ODEQ in March 1997. Field work for the NCP site assessment was conducted by START from April to August 1998.
4. ESI results indicated high concentrations of TPH, lead, and some PAHs in oily waste at numerous locations on site, and high concentrations of lead in the unvegetated area soil, so these waste sources were not sampled further by START for this NCP site assessment.

5. Subsurface geologic conditions at the site generally consist of a thin (0 to 10 feet) brown, silty sand layer above weathered red sandstone. Seasonal perched water is present in thin lenses above the sandstone, but the shallowest saturated sandstone aquifer on site is estimated at 45 to 60 feet bgs. Rainfall runoff and shallow subsurface ground water flow follow the topography south and east or west toward Tributaries 1 and 2 on site, and toward Sand Creek to the south.
6. START collected 55 subsurface soil samples, eight ground water samples, four surface water samples, two sediment samples, and 12 field QC samples. Samples were submitted for laboratory analysis of volatile BTEX compounds, semi-volatile PAHs, TPH, metals, and pH.
- Subsurface soil sample results confirm the presence of significant concentrations of all BTEX compounds, eight PAH compounds including benzo(a)pyrene, seven metals but most significantly lead, and TPH. All these contaminants of concern appear to be related to the disposal and abandonment of refinery waste on site.
 - Sediment sampling results and shallow subsurface soil sampling results in the dry stream bed of Tributary 1 and Pond 2 confirm the presence of elevated concentrations of four PAH compounds including benzo(a)pyrene, as well as lead, and TPH. Attribution of metals contamination in the Tributary 1 stream bed is problematic due to significant upstream sources of lead contamination. However, lead in Pond 2 sediment, and PAHs and TPH in the lower reaches of Tributary 1 are significant sources of potential surface water contaminant migration on site.
 - Ground water sampling results for organic compounds detected elevated concentrations of BTEX compounds and TPH at several distinct locations on site. Attempts to define plume boundaries proved unsuccessful and the potential shallow ground water to surface water migration pathway at sample sites GW1, GW2, GW4, and GW5, appear insignificant. The GW3 water sample was from shallow saturated soil adjacent to Tributary 1 and is indicative of contaminated soil pore space water in contact with surface water.
 - BTEX compounds and TPH were not detected in surface water samples. Samples were collected during dry conditions with no flow in Tributaries 1 and 2. START observed visible sheens on on-site runoff after a storm event in April 1998; however, no release to surface water was recorded.
 - The laboratory data package was evaluated using standard EPA validation procedures. Numerous data were qualified as estimated and a total of 55 metals data points were rejected mainly due to poor spike recoveries. Further evaluation of data quality was performed using PARCC parameters, with the overall usability of the data being acceptable and the analytical completeness ranging from 96% for metals to 100% for BTEX and PAHs.
7. Approximately 73,000 cubic yards of oily waste and contaminated soil, and 3,000 gallons of liquid waste was identified at 18 source areas on the Wilcox refinery site. This waste volume estimate does not include known areas of contaminated ground water on site, or the quantity of oily liquid observed entering the lower reaches of Tributary 1 from the White property via a buried pipeline. In addition, the volume of

contaminated soil on the former refinery site and pumping station area in particular are unknown, and can only be determined by a systematic and comprehensive drilling and sampling program.

8. A total of five people live on site, at the White residence (two adults), and Lee residence (two adults and one child). Based on limited surface and subsurface soil, and perched ground water sampling results, both residences are located on significantly contaminated waste source areas. The White residence is a former office at the main gate truck fuel loading facility and the Lee residence is built on a backfilled refinery pond surrounded by other waste sources. Relocation or removal action at both residences is warranted.

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TENNESSEE OIL REFINING CORPORATION

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C O R P O R A T E R E C O R D S

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REGISTERED
WITH
THE CORPORATION TRUST COMPANY
WILMINGTON, DELAWARE

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TGP0004121
TGP0004121
EPR0001174

CERTIFICATE OF INCORPORATION
OF
TENNESSEE OIL REFINING CORPORATION

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FIRST. The name of the corporation is
TENNESSEE OIL REFINING CORPORATION

SECOND. Its principal office in the
State of Delaware is located at No. 100 West Tenth
Street, in the City of Wilmington, County of New
Castle. The name and address of its resident agent
is The Corporation Trust Company, No. 100 West
Tenth Street, Wilmington 99, Delaware.

THIRD. The nature of the business, or
objects or purposes to be transacted, promoted or
carried on are:

To carry on all phases of the oil, pe-
troleum and natural gas business, and to acquire,
own, lease, hold, construct, maintain, operate and
sell or otherwise dispose of oil or natural gas

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leases, lands, rights, or other interests, oil or natural gas wells, pipe lines, refineries, compressor and pumping stations, storage facilities, and in general all other facilities incidental to, necessary for, or useful in carrying out production, gathering, transportation, refining, processing and sale and distribution of oil, gasoline, naphtha, kerosene, natural gas and/or other petroleum products at wholesale or retail.

b
To establish and maintain an oil business with authority to contract for the lease and purchase of the right to prospect for, develop and use coal and other minerals, petroleum and gas; also the right to erect, build and own all necessary oil tanks, cars and pipes and other property necessary for the operation of such business.

To buy, exchange, construct, contract for, lease and in any and all other ways acquire, take, hold and own refineries for the treatment of petroleum and other mineral oils and gases; the tanks and other facilities for the storage thereof; and the manufacturing plants, works and appurtenances for the production, distribution and

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sale of petroleum, oil, gas and of any and all refinements and by-products thereof; to prospect for oil; to drill oil wells and to develop the same; to refine crude oil, to improve, maintain, operate and develop, and to sell, mortgage, lease or otherwise dispose of the said properties, and to sell or otherwise dispose of such petroleum, oil, and all refinements and by-products thereof.

b
To engage in the business of developing, purchasing, selling, manufacturing, compounding, refining, distributing, importing, exporting, exploiting and using, and to develop, purchase, sell, manufacture, compound, refine, distill, treat, prepare, analyze, synthesize, produce and in every way deal in and with, chemicals of every kind, chemical materials, substances and products, including without limitation pharmaceuticals, biologicals, viruses and serums of all kinds, acids, alkalis and salts, their compounds and derivatives, and also derivatives, materials, products, substances and combinations produced or manufactured therefrom, including solids, liquids and gases of all kinds; to engage in the separation or reduction and treatment of solids, liquids and gases into their con-

b

stltuents; to develop, produce and utilize and deal in and with chemical combinations of all kinds.

To acquire by lease, purchase, contract, concession or otherwise, and to own, develop, explore, exploit, improve, operate, lease, enjoy, control, manage or otherwise turn to account, mortgage, grant, sell, exchange, convey or otherwise dispose of any and all real estate, lands, options, concessions, leases, grants, land patents, franchises, deposits, mines, mining rights, quarries, locations, claims, rights, privileges and easements, tenements, appurtenances and hereditaments, interests and properties of every description and nature whatsoever which this Corporation may deem wise and proper in connection with the conduct of any business or businesses enumerated in this certificate of incorporation or in any other business in which this Corporation may lawfully engage.

To carry on and conduct research work upon any and all problems arising in connection with the development of its properties for the production and transportation of oil, gas, sulphur and other minerals and the refining and ex-

P traction therefrom and the reforming of any mineral or petroleum product or by-product or derivative thereof or in connection with any of the other objects and purposes of the Corporation.

To apply for, obtain, purchase, lease, take licenses in respect of, or otherwise acquire and hold, own, operate, enjoy, turn to account, grant licenses in respect of, manufacture, introduce, sell, assign, mortgage, pledge or otherwise dispose of:

(1) any and all inventions, devices, formulae and all improvements and modifications thereof;

(2) any and all letters patent of the United States or of any other nation or country and all rights connected therewith or appertaining thereto;

(3) any and all copyrights granted by the United States or by any other nation or country;

(4) any and all trade marks, trade names, trade symbols, good will and other indications of origin and ownership granted by or recognized by the laws or decisions of the United

States or of any other nation or country.

To manufacture, purchase or otherwise acquire, invest in, own, mortgage, pledge, sell, assign and transfer or otherwise dispose of, trade, deal in and deal with goods, wares and merchandise and personal property of every class and description.

To acquire, and pay for in cash, stock or bonds of this Corporation or otherwise, the good will, rights, assets and property, and to undertake or assume the whole or any part of the obligations or liabilities of any person, firm, association or corporation.

To acquire, hold, use, sell, assign, lease, grant licenses in respect of, mortgage or otherwise dispose of letters patent of the United States or any foreign country, patent rights, licenses and privileges, inventions, improvements and processes, copyrights, trademarks and trade names, relating to or useful in connection with any business of this Corporation.

To acquire by purchase, subscription or

otherwise, and to receive, hold, own, guarantee, sell, assign, exchange, transfer, mortgage, pledge or otherwise dispose of or deal in and with any of the shares of the capital stock, or any voting trust certificates in respect of the shares of capital stock, scrip, warrants, rights, bonds, debentures, notes, trust receipts, and other securities, obligations, choses in action and evidences of indebtedness or interest issued or created by any corporations, joint stock companies, syndicates, associations, firms, trusts or persons, public or private, or by the government of the United States of America, or by any foreign government, or by any state, territory, province, municipality or other political subdivision or by any governmental agency, and as owner thereof to possess and exercise all the rights, powers and privileges of ownership, including the right to execute consents and vote thereon, and to do any and all acts and things necessary or advisable for the preservation, protection, improvement and enhancement in value thereof.

To issue its capital stock, bonds, debentures, or other obligations in payment for proper-

ty purchased or acquired by it, or for money borrowed, or for any other lawful object in or about its business.

To acquire and pay for in cash, stock or bonds of this Corporation, or otherwise, the goodwill, rights, assets and properties, and to undertake or assume, in whole or in part, the obligations of any person, firm, association or corporation.

To enter into, make and perform contracts of every kind and description with any person, firm, association, corporation, municipality, county, state, body politic or government or colony or dependency thereof.

To borrow or raise moneys for any of the purposes of the Corporation and, from time to time, without limit as to amount to draw, make, accept, endorse, execute and issue promissory notes, drafts, bills of exchange, warrants, bonds, debentures and other negotiable or non-negotiable instruments and evidences of indebtedness, and to secure the payment of any thereof and of the interest thereon by mortgage upon or pledge, conveyance or assign-

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ment in trust of the whole or any part of the property of the Corporation, whether at the time owned or thereafter acquired, and to sell, pledge or otherwise dispose of such bonds or other obligations of the Corporation for its corporate purposes.

To loan to any person, firm or corporation any of its funds, either with or without security.

B
To purchase, hold, sell and transfer the shares of its own capital stock; provided it shall not use its funds or property for the purchase of its own shares of capital stock when such use would cause any impairment of its capital except as otherwise permitted by law, and provided further that shares of its own capital stock belonging to it shall not be voted upon directly or indirectly.

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To have one or more offices, to carry on all or any of its operations and business and without restriction or limit as to amount to purchase or otherwise acquire, hold, own, mortgage, sell, convey, or otherwise dispose of real and personal property of every class and description in any of the States, Districts, Territories or

Colonies of the United States, and in any and all foreign countries, subject to the laws of such State, District, Territory, Colony or Country.

To conduct and carry on any of the objects and purposes herein enumerated through or by means of investment in subsidiaries or in the stock, securities, or other evidences of interest in corporations, associations, partnerships, or trust estates engaged in carrying on or conducting any one or more of the businesses or enterprises which the Corporation is authorized to conduct and carry on hereunder.

In general, to carry on any other business in connection with the foregoing, and to have and exercise all the powers conferred by the laws of Delaware upon corporations formed under the General Corporation Law of the State of Delaware, and to do any or all of the things hereinbefore set forth to the same extent as natural persons might or could do.

The objects and purposes specified in the foregoing clauses shall, except where otherwise expressed, be in nowise limited or restricted

by reference to, or inference from, the terms of any other clause in this certificate of incorporation, but the objects and purposes specified in each of the foregoing clauses of this article shall be regarded as independent objects and purposes.

FOURTH. The total number of shares which the Corporation shall have authority to issue is two hundred (200) and the Par Value of each of said shares is Five Dollars (\$5.00), amounting in the aggregate to One Thousand Dollars (\$1,000.00).

FIFTH. The minimum amount of capital with which the Corporation will commence business is One Thousand Dollars (\$1,000.00).

SIXTH. The names and places of residence of the Incorporators are as follows:

<u>NAMES</u>	<u>RESIDENCES</u>
R. F. Westover	Wilmington, Delaware
L. A. Schoonmaker	Wilmington, Delaware
A. D. Atwell	Wilmington, Delaware

SEVENTH. The Corporation is to have perpetual existence.

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EIGHTH. The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatever.

b

NINTH. Ownership of shares of any class of the capital stock of the Corporation shall not entitle the holders thereof to any preemptive right to subscribe for or purchase or to have offered to them for subscription or purchase any additional shares of capital stock of any class of the Corporation or any securities convertible into any class of capital stock of the Corporation, whether now or hereafter authorized, however acquired, issued or sold by the Corporation, it being the purpose and intent hereof that the Board of Directors shall have full right, power and authority to offer for subscription or sell or to make any disposal of any or all unissued shares of the capital stock of the Corporation or any securities convertible into stock or any or all shares of stock or convertible securities issued and thereafter acquired by the Corporation, for such consideration, in money or property, as the Board of Directors in its sole discretion shall determine.

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TENTH. All corporate powers shall be exercised by the Board of Directors except as otherwise provided by statute.

The number of Directors of the Corporation shall be fixed from time to time by the By-Laws and may be altered as the By-Laws may provide.

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized:

b

(a) To make, amend, alter, change, add to or repeal the By-Laws of the Corporation.

(b) To fix, determine and vary from time to time the amount to be maintained as surplus and the amount or amounts to be set apart as working capital.

(c) To authorize and cause to be executed mortgages and liens upon the real and personal property of the Corporation.

(d) To set apart out of any of the funds of the Corporation available for dividends a reserve or reserves for any proper purpose and

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to abolish any such reserve in the manner in which it was created.

(e) By resolution passed by a majority of the whole Board, to designate one or more committees, each committee to consist of two or more of the Directors of the Corporation, which, to the extent provided in the Resolution or in the By-Laws of the Corporation, shall have and may exercise the powers of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it. Such committee or committees shall have such name or names as may be stated in the By-laws of the Corporation or as may be determined from time to time by Resolution adopted by the Board of Directors.

(f) When and as authorized by the affirmative vote of the holders of a majority of the stock issued and outstanding having voting power given at a stockholders' meeting duly called for that purpose, or when author-

ized by the written consent of the holders of a majority of the voting stock issued and outstanding, to sell, lease or exchange all of the property and assets of the Corporation, including its good will and its corporate franchises, upon such terms and conditions and for such consideration, which may be in whole or in part shares of stock in, and/or other securities of, any other corporation or corporations, as its Board of Directors shall deem expedient and for the best interests of the Corporation.

(g) Without the assent or vote of the stockholders, to authorize and issue obligations of the Corporation in such amounts and having such terms and provisions as the Board of Directors in its sole discretion shall determine and to authorize and cause to be executed mortgages and liens, without limit as to amount, upon the real and personal property of the Corporation.

(h) From time to time to determine whether and to what extent, at what time and place, and

under what conditions and regulations the accounts and books of the Corporation or any of them, shall be open to the inspection of any stockholder and no stockholder shall have any right to inspect any account or book or document of the Corporation except as conferred by statute or the By-laws or as authorized by a Resolution of the stockholders or the Board of Directors.

(i) To authorize the payment of compensation to the Directors for services to the Corporation, including fees for special services to the Corporation and for attendance at meetings of the Board of Directors and of any committees of the Board of Directors and to determine the amount of such compensation and fees.

(j) At any time or from time to time (without any action by the stockholders of the Corporation) to create and issue, whether or not in connection with the issue and sale of any shares of stock or other securities of the Corporation, rights or options entitling

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the holders thereof to purchase from the Corporation any shares of its capital stock of any class or classes or of any series of any class or classes, such rights or options to be evidenced by or in such instrument or instruments as shall be approved by the Board of Directors. The terms upon which, the time or times, which may be limited or unlimited in duration, at or within which, and the price or prices at which any such shares may be purchased from the Corporation upon the exercise of any such right or option shall be such as shall be fixed and stated in the Resolution or Resolutions adopted by the Board of Directors providing for the creation and issue of such rights or options, and, in every case, set forth or incorporated by reference in the instrument or instruments evidencing such rights or options.

b

No contract or other transaction between the Corporation or any other corporation shall be affected or invalidated by the fact that one or more of the Directors of this Corporation are interested in, or is a Director or Directors or Of-

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fleeer or Officers of such other corporation, and no contract or other transaction between the Corporation and any other person or firm shall be affected or invalidated by the fact that one or more of the Directors of this Corporation is a party to, or are parties to, or interested in, such contract or transaction; provided that in each such case the nature and extent of the interest of such Director or Directors in such contract or other transaction and/or the fact that such Director or Directors is or are a Director or Directors or Officer or Officers of such other corporation is known to the Board of Directors or is disclosed at the meeting of the Board of Directors at which such contract or other transaction is authorized.

b
A Director shall be fully protected in relying in good faith upon the books of account of the Corporation or statements prepared by any of its officials as to the value and amount of the assets, liabilities and/or net profits of the Corporation, or any other facts pertinent to the existence and amount of surplus or other funds from which dividends might properly be declared and paid.

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The Corporation may in its By-Laws confer powers upon its Board of Directors in addition to the foregoing, and in addition to the powers and authorities expressly conferred upon it by statute.

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ELEVENTH. Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for this Corporation under the provisions of section 291 of Title 8 of the Delaware Code, or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors,

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P and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

b TWELFTH. Meetings of stockholders may be held outside the State of Delaware, if the By-Laws so provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the By-Laws of the Corporation. Elections of Directors need not be by ballot unless the By-Laws of the Corporation shall so provide.

THIRTEENTH. The Corporation reserves the right to amend, alter, change or repeal any

provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

WE, THE UNDERSIGNED, being each of the Incorporators hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this Certificate, hereby declaring and certifying that the facts herein stated are true, and accordingly have hereunto set our hands and seals this 26th day of February, A. D. 1960.

R. F. WESTOVER (SEAL)

L. A. SCHOONMAKER (SEAL)

A. D. ATWELL (SEAL)

THE STATE OF DELAWARE }
COUNTY OF NEW CASTLE } ss:

BE IT REMEMBERED that on this 26th day
of February, A. D. 1960, personally came before
me, a Notary Public for the State of Delaware,
R. F. Westover, L. A. Schoonmaker and A. D. Atwell,
all of the parties to the foregoing Certificate of
Incorporation, known to me personally to be such,
and severally acknowledged the said Certificate
to be the act and deed of the signers respectively
and that the facts therein stated are truly set
forth.

GIVEN under my hand and seal of office
the day and year aforesaid.

Howard K. Webb
Notary Public

""""""""
" Howard K. Webb "
" Notary Public "
"Appointed June 27, 1958 "
" State of Delaware "
" Term Two Years "
""""""""

STATE OF DELAWARE
OFFICE OF SECRETARY OF STATE

I, GEORGE J. SCHULZ, Secretary of State
of the State of Delaware, DO HEREBY CERTIFY that
the above and foregoing is a true and correct copy
of Certificate of Incorporation of the "TENNESSEE
OIL REFINING CORPORATION", as received and filed
in this office the twenty-sixth day of February,
A. D. 1960, at 10 o'clock A. M.

IN TESTIMONY WHEREOF, I have hereunto
set my hand and official seal at Dover
this twenty-sixth day of February in the
year of our Lord one thousand nine hundred
and sixty.

GEORGE J. SCHULZ
Secretary of State

M. D. TOMLINSON
Ass't. Secretary of State

Secretary's Office
1855 Delaware 1793

Received for Record

February 26th, A. D. 1960.

Joseph A. Bradshaw, Recorder.

STATE OF DELAWARE :
: SS.:
NEW CASTLE COUNTY :

Recorded in the Recorder's Office
at Wilmington, in Incorporation Record ,
Vol. Page &c., the 26th day
of February, A. D. 1960.

Witness my hand and official seal.

Joseph A. Bradshaw,
Recorder.

Recorder of Deeds Office "
New Castle Co. Del. "
Mercy - Justice. "
"

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
TENNESSEE OIL REFINING CORPORATION

- - -

TENNESSEE OIL REFINING CORPORATION, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That the Board of Directors of said corporation, at a meeting duly convened and held, adopted a Resolution proposing and declaring advisable the following Amendment to the Certificate of Incorporation of said corporation:

RESOLVED, that the Certificate of Incorporation of TENNESSEE OIL REFINING CORPORATION be amended by changing the Article thereof numbered "FIRST" so that, as amended, said Article shall be and read as follows:

"FIRST. The name of the corporation is TENNECO OIL COMPANY."

SECOND: That the said Amendment has been consented to and authorized by the holder of all the issued and outstanding stock, entitled to vote, by a written consent given in accordance with the provisions of Section 228 of Title 8 of The Delaware Code of 1960, and filed with the corporation on the 17th day of November, 1960.

THIRD: That the aforesaid Amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of Title 8 of The Delaware Code of 1960.

IN WITNESS WHEREOF, said TENNESSEE OIL REFINING CORPORATION has caused its corporate seal to be hereunto affixed and this Certificate to be signed by Charles S. Taylor, Jr., its President, and M. H. Covey, Secretary, this 17th day of November, 1960.

TENNESSEE OIL REFINING CORPORATION

By Charles S. Taylor, Jr.
President

TENNESSEE OIL REFINING CORPORATION
CORPORATE
SEAL
DELAWARE
1960

By M. H. Covey
Secretary

THE STATE OF TEXAS
COUNTY OF HARRIS

SS:

BE IT REMEMBERED that on this 17th day of November, A. D., 1960, personally came before me, a Notary Public in and for the County and State aforesaid, Charles S. Taylor, Jr., President of TENNESSEE OIL REFINING CORPORATION, a corporation of the State of Delaware, the corporation described in and which executed the foregoing Certificate, known to me personally to be such, and he, the said Charles S. Taylor, Jr. as such President, duly executed said Certificate before me and acknowledged the said Certificate to be his act and deed and the act and deed of said corporation; that the signatures of the said President and of the Secretary of said Corporation to said foregoing Certificate are in the handwriting

of the said President and Secretary of said corporation respectively, and that the seal affixed to said Certificate is the common or corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office the day and year aforesaid.

Ruth Smoot
Notary Public

NOTARY PUBLIC
COUNTY OF HARRIS, TEXAS

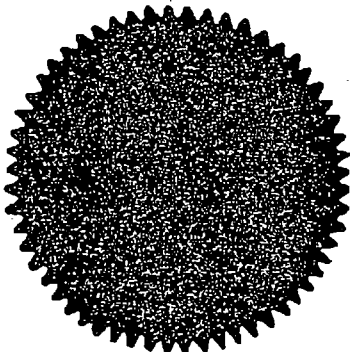
Ruth Smoot
Notary Public in and for Harris County, Texas
My Commission expires June 1, 1961



Office of Secretary of State

I, George J. Schulz, Secretary of State of the State of Delaware,
do hereby certify that the above and foregoing is a true and correct copy of
Certificate of Amendment of Certificate of Incorporation of the
"TENNESSEE OIL REFINING CORPORATION", as received and filed in this
office the twenty-eighth day of November, A.D. 1960, at 10 o'clock
A.M.

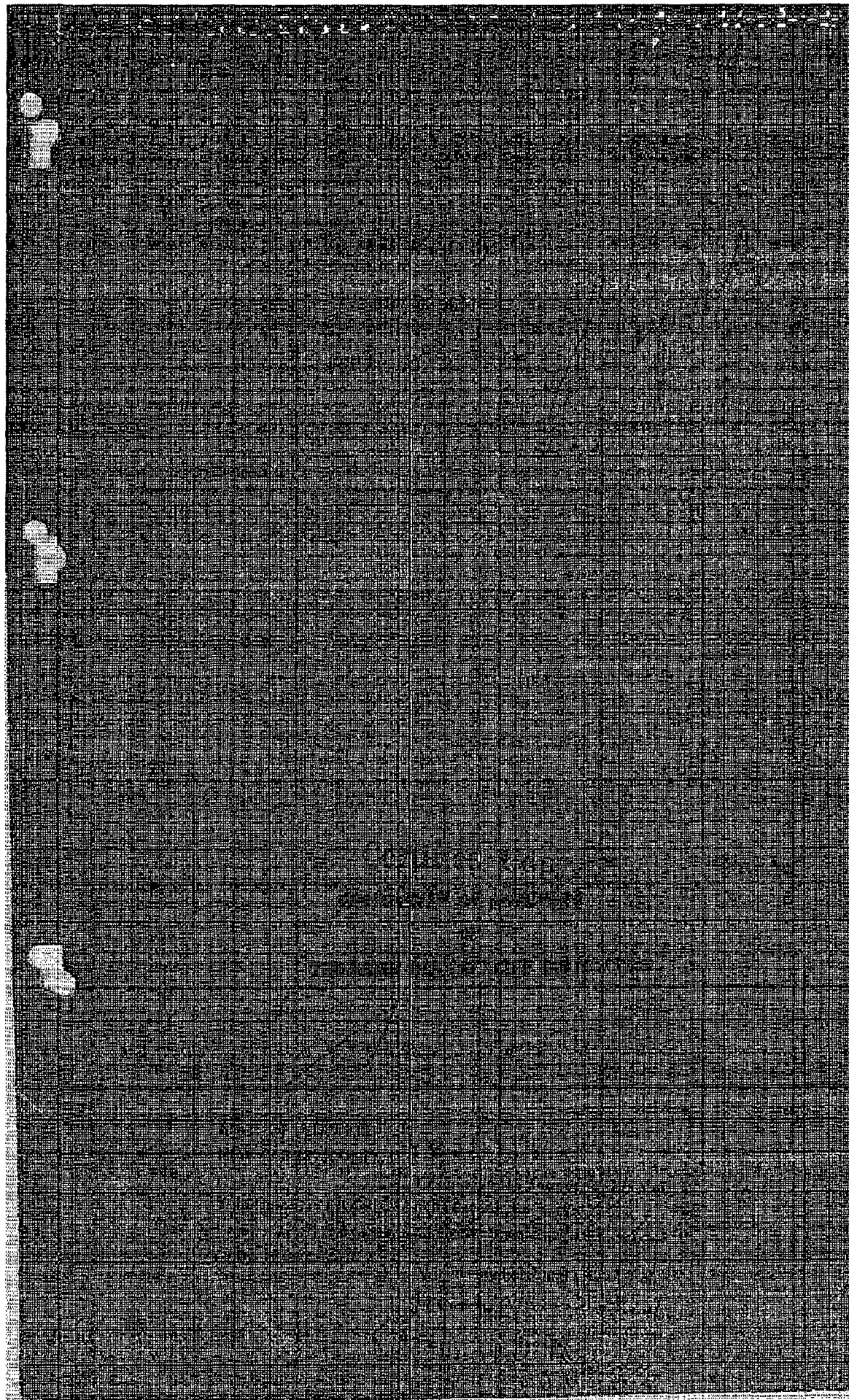
In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this twenty-eighth day
of November in the year of our Lord
one thousand nine hundred and sixty.



George J. Schulz
Secretary of State
M. D. Tomlinson

Att's. Secretary of State

TGP0004149
TGP0004149
EPR0001202



TGP0004150

TGP0004150
EPR0001203

COMPOSITE
CERTIFICATE OF INCORPORATION
OF
TENNECO OIL COMPANY

FIRST. The name of the corporation is

TENNECO OIL COMPANY

SECOND. Its principal office in the State of Delaware is located at No. 100 West Tenth Street, in the City of Wilmington, County of New Castle. The name and address of its resident agent is The Corporation Trust Company, No. 100 West Tenth Street, Wilmington 99, Delaware.

THIRD. The nature of the business, or objects or purposes to be transacted, promoted or carried on are:

To carry on all phases of the oil, petroleum and natural gas business, and to acquire, own, lease, hold, construct, maintain, operate and sell or otherwise dispose of oil or natural gas leases, lands, rights, or other interests, oil or natural gas wells, pipe lines, refineries, compressor and pumping stations, storage facilities, and in general all other facilities incidental to, necessary for, or useful in carrying out production, gathering, transportation, refining, processing and sale and distribution of oil, gasoline, naphtha, kerosene, natural gas and/or other petroleum products at wholesale or retail.

To establish and maintain an oil business with authority to contract for the lease and purchase of the right to prospect for, develop and use coal and other minerals, petroleum and gas; also the right to erect, build and own all necessary oil tanks, cars and pipes and other property necessary for the operation of such business.

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TGP0004151
EPR0001204

To buy, exchange, construct, contract for, lease and in any and all other ways acquire, take, hold and own refineries for the treatment of petroleum and other mineral oils and gases; the tanks and other facilities for the storage thereof; and the manufacturing plants, works and appurtenances for the production, distribution and sale of petroleum, oil, gas and of any and all refinements and by-products thereof; to prospect for oil; to drill oil wells and to develop the same; to refine crude oil, to improve, maintain, operate and develop, and to sell, mortgage, lease or otherwise dispose of the said properties, and to sell or otherwise dispose of such petroleum, oil, and all refinements and by-products thereof.

To engage in the business of developing, purchasing, selling, manufacturing, compounding, refining, distributing, importing, exporting, exploiting and using, and to develop, purchase, sell, manufacture, compound, refine, distill, treat, prepare, analyze, synthesize, produce and in every way deal in and with, chemicals of every kind, chemical materials, substances and products, including without limitation pharmaceuticals, biologicals, viruses and serums of all kinds, acids, alkalis and salts, their compounds and derivatives, and also derivatives, materials, products, substances and combinations produced or manufactured therefrom, including solids, liquids and gases of all kinds; to engage in the separation or reduction and treatment of solids, liquids and gases into their constituents; to develop, produce and utilize and deal in and with chemical combinations of all kinds.

To acquire by lease, purchase, contract, concession or otherwise, and to own, develop, explore, exploit, improve, operate, lease, enjoy, control, manage or otherwise turn to account, mortgage, grant, sell, exchange, convey or

otherwise dispose of any and all real estate, lands, options, concessions, leases, grants, land patents, franchises, deposits, mines, mining rights, quarries, locations, claims, rights, privileges and easements, tenements, appurtenances and hereditaments, interests and properties of every description and nature whatsoever which this Corporation may deem wise and proper in connection with the conduct of any business or businesses enumerated in this certificate of incorporation or in any other business in which this Corporation may lawfully engage.

To carry on and conduct research work upon any and all problems arising in connection with the development of its properties for the production and transportation of oil, gas, sulphur and other minerals and the refining and extraction therefrom and the reforming of any mineral or petroleum product or by-product or derivative thereof or in connection with any of the other objects and purposes of the Corporation.

To apply for, obtain, purchase, lease, take licenses in respect of, or otherwise acquire and hold, own, operate, enjoy, turn to account, grant licenses in respect of, manufacture, introduce, sell, assign, mortgage, pledge or otherwise dispose of:

- (1) any and all inventions, devices, formulae and all improvements and modifications thereof;
- (2) any and all letters patent of the United States or of any other nation or country and all rights connected therewith or appertaining thereto;
- (3) any and all copyrights granted by the United States or by any other nation or country;

(4) any and all trade marks, trade names, trade symbols, good will and other indications of origin and ownership granted or recognized by the laws or decisions of the United States or of any other nation or country.

To manufacture, purchase or otherwise acquire, invest in, own, mortgage, pledge, sell, assign and transfer or otherwise dispose of, trade, deal in and deal with goods, wares and merchandise and personal property of every class and description.

To acquire, and pay for in cash, stock or bonds of this Corporation or otherwise, the good will, rights, assets and property, and to undertake or assume the whole or any part of the obligations or liabilities of any person, firm, association or corporation.

To acquire, hold, use, sell, assign, lease, grant licenses in respect of, mortgage or otherwise dispose of letters patent of the United States or any foreign country, patent rights, licenses and privileges, inventions, improvements and processes, copyrights, trademarks and trade names, relating to or useful in connection with any business of this Corporation.

To acquire by purchase, subscription or otherwise, and to receive, hold, own, guarantee, sell, assign, exchange, transfer, mortgage, pledge or otherwise dispose of or deal in and with any of the shares of the capital stock, or any voting trust certificates in respect of the shares of capital stock, scrip, warrants, rights, bonds, debentures, notes, trust receipts, and other securities, obligations, choses in action and evidences of indebtedness or interest issued or created by any corporations, joint stock companies, syndicates, associations, firms, trusts or persons, public or private, or by the

government of the United States of America, or by any foreign government, or by any state, territory, province, municipality or other political subdivision or by any governmental agency, and as owner thereof to possess and exercise all the rights, powers and privileges of ownership, including the right to execute consents and vote thereon, and to do any and all acts and things necessary or advisable for the preservation, protection, improvement and enhancement in value thereof.

To issue its capital stock, bonds, debentures, or other obligations in payment for property purchased or acquired by it, or for money borrowed, or for any other lawful object in or about its business.

To acquire and pay for in cash, stock or bonds of this Corporation, or otherwise, the goodwill, rights, assets and properties, and to undertake or assume, in whole or in part, the obligations of any person, firm, association or corporation.

To enter into, make and perform contracts of every kind and description with any person, firm, association, corporation, municipality, county, state, body politic or government or colony or dependency thereof.

To borrow or raise moneys for any of the purposes of the Corporation and, from time to time, without limit as to amount to draw, make, accept, endorse, execute and issue promissory notes, drafts, bills of exchange, warrants, bonds, debentures and other negotiable or non-negotiable instruments and evidences of indebtedness, and to secure the payment of any thereof and of the interest thereon by mortgage upon or pledge, conveyance or assignment in trust of the whole or any part of the property of the Corporation, whether at the time owned or thereafter acquired, and to sell, pledge or otherwise dispose of such bonds or other obligations of the Corporation for its corporate purposes.

To loan to any person, firm or corporation any of its funds, either with or without security.

To purchase, hold, sell and transfer the shares of its own capital stock; provided it shall not use its funds or property for the purchase of its own shares of capital stock when such use would cause any impairment of its capital except as otherwise permitted by law, and provided further that shares of its own capital stock belonging to it shall not be voted upon directly or indirectly.

To have one or more offices, to carry on all or any of its operations and business and without restriction or limit as to amount to purchase or otherwise acquire, hold, own, mortgage, sell, convey, or otherwise dispose of real and personal property of every class and description in any of the States, Districts, Territories or Colonies of the United States, and in any and all foreign countries, subject to the laws of such State, District, Territory, Colony or Country.

To conduct and carry on any of the objects and purposes herein enumerated through or by means of investment in subsidiaries or in the stock, securities, or other evidences of interest in corporations, associations, partnerships, or trust estates engaged in carrying on or conducting any one or more of the businesses or enterprises which the Corporation is authorized to conduct and carry on hereunder.

In general, to carry on any other business in connection with the foregoing, and to have and exercise all the powers conferred by the laws of Delaware upon corporations formed under the General Corporation Law of the State of Delaware, and to do any or all of the things hereinbefore set forth to the same extent as natural persons might or could do.

The objects and purposes specified in the foregoing clauses shall, except where otherwise expressed, be in nowise limited or restricted by reference to, or inference from, the terms of any other clause in this certificate of incorporation, but the objects and purposes specified in each of the foregoing clauses of this article shall be regarded as independent objects and purposes.

FOURTH. The total number of shares which the Corporation shall have authority to issue is two hundred (200) and the Par Value of each of said shares is Five Dollars (\$5.00), amounting in the aggregate to One Thousand Dollars (\$1,000.00).

FIFTH. The minimum amount of capital with which the Corporation will commence business is One Thousand Dollars (\$1,000.00).

SIXTH. The names and places of residence of the Incorporators are as follows:

<u>NAMES</u>	<u>RESIDENCES</u>
R. F. Westover	Wilmington, Delaware
L. A. Schoonmaker	Wilmington, Delaware
A. B. Atwell	Wilmington, Delaware

SEVENTH. The Corporation is to have perpetual existence.

EIGHTH. The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatever.

NINTH. Ownership of shares of any class of the capital stock of the Corporation shall not entitle the holders thereof to any pre-emptive right to subscribe for or purchase or to have offered to them for subscription or purchase any additional shares of capital stock of any class of the Corporation or any securities convertible into any class of capital stock of the

Corporation, whether now or hereafter authorized, however acquired, issued or sold by the Corporation, it being the purpose and intent hereof that the Board of Directors shall have full right, power and authority to offer for subscription or sell or to make any disposal of any or all unissued shares of the capital stock of the Corporation or any securities convertible into stock or any or all shares of stock or convertible securities issued and thereafter acquired by the Corporation, for such consideration, in money or property, as the Board of Directors in its sole discretion shall determine.

TENTH. All corporate powers shall be exercised by the Board of Directors except as otherwise provided by statute.

The number of Directors of the Corporation shall be fixed from time to time by the By-Laws and may be altered as the By-Laws may provide.

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized:

(a) To make, amend, alter, change, add to or repeal the By-Laws of the Corporation.

(b) To fix, determine and vary from time to time the amount to be maintained as surplus and the amount or amounts to be set apart as working capital.

(c) To authorize and cause to be executed mortgages and liens upon the real and personal property of the Corporation.

(d) To set apart out of any of the funds of the Corporation available for dividends a reserve or reserves for any proper purpose and to abolish any such reserve in the manner in which it was created.

(e) By resolution passed by a majority of the whole Board, to designate one or more committees, each committee to consist of two or more of the Directors of the Corporation, which, to the extent provided in the Resolution or in the By-Laws of the Corporation, shall have and may exercise the powers of the Board of Directors in the management of the business and affairs of the Corporation and may authorize the seal of the Corporation to be affixed to all papers which may require it. Such committee or committees shall have such name or names as may be stated in the By-Laws of the Corporation or as may be determined from time to time by Resolution adopted by the Board of Directors.

(f) When and as authorized by the affirmative vote of the holders of a majority of the stock issued and outstanding having voting power given at a stockholders' meeting duly called for that purpose, or when authorized by the written consent of the holders of a majority of the voting stock issued and outstanding, to sell, lease or exchange all of the property and assets of the Corporation, including its good will and its corporate franchises, upon such terms and conditions and for such consideration, which may be in whole or in part shares of stock in, and/or other securities of, any other corporation or corporations, as its Board of Directors shall deem expedient and for the best interests of the Corporation.

(g) Without the assent or vote of the stockholders, to authorize and issue obligations of the Corporation in such amounts and having such terms and provisions as the Board of Directors in its sole discretion shall determine and to authorize and cause to be executed

mortgages and liens, without limit as to amount, upon the real and personal property of the Corporation.

(h) From time to time to determine whether and to what extent, at what time and place, and under what conditions and regulations the accounts and books of the Corporation or any of them, shall be open to the inspection of any stockholder and no stockholder shall have any right to inspect any account or book or document of the Corporation except as conferred by statute or the By-Laws or as authorized by a Resolution of the Stockholders or the Board of Directors.

(i) To authorize the payment of compensation to the Directors for services to the Corporation, including fees for special services to the Corporation and for attendance at meetings of the Board of Directors and of any committees of the Board of Directors and to determine the amount of such compensation and fees.

(j) At any time or from time to time (without any action by the stockholders of the Corporation) to create and issue, whether or not in connection with the issue and sale of any shares of stock or other securities of the Corporation, rights or options entitling the holders thereof to purchase from the Corporation any shares of its capital stock of any class or classes or of any series of any class or classes, such rights or options to be evidenced by or in such instrument or instruments as shall be approved by the Board of Directors. The terms upon which, the time or times, which may be limited or unlimited in duration, at or within which, and the price or prices at which any such shares may be purchased from the Corporation upon the exercise of any such right or

option shall be such as shall be fixed and stated in the Resolution or Resolutions adopted by the Board of Directors providing for the creation and issue of such rights or options, and, in every case, set forth or incorporated by reference in the instrument or instruments evidencing such rights or options.

No contract or other transaction between the Corporation or any other corporation shall be affected or invalidated by the fact that one or more of the Directors of this Corporation are interested in, or is a Director or Directors or Officer or Officers of such other corporation, and no contract or other transaction between the Corporation and any other person or firm shall be affected or invalidated by the fact that one or more of the Directors of this Corporation is a party to, or are parties to, or interested in, such contract or transaction; provided that in each such case the nature and extent of the interest of such Director or Directors in such contract or other transaction and/or the fact that such Director or Directors is or are a Director or Directors or Officer or Officers of such other corporation is known to the Board of Directors or is disclosed at the meeting of the Board of Directors at which such contract or other transaction is authorized.

A Director shall be fully protected in relying in good faith upon the books of account of the Corporation or statements prepared by any of its officials as to the value and amount of the assets, liabilities and/or net profits of the Corporation, or any other facts pertinent to the existence and amount of surplus or other funds from which dividends might properly be declared and paid.

P
The Corporation may in its By-Laws confer powers upon its Board of Directors in addition to the foregoing, and in addition to the powers and authorities expressly conferred upon it by statute.

B
ELEVENTH. Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them and/or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, in the application in a summary way of this Corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for this Corporation under the provisions of section 291 of Title 8 of the Delaware Code, or on the application of trustees in dissolution or of any receiver or receivers appointed for this Corporation under the provisions of section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation, as the case may be, and also on this Corporation.

TWELFTH. Meetings of stockholders may be held outside the State of Delaware, if the By-Laws so provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the By-Laws of the Corporation. Elections of Directors need not be by ballot unless the By-Laws of the Corporation shall so provide.

THIRTEENTH. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

WE, THE UNDERSIGNED, being each of the Incorporators hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this Certificate, hereby declaring and certifying that the facts herein stated are true, and accordingly have hereunto set our hands and seals this 26th day of February, A. D. 1960.

R. F. Westover (SEAL)

L. A. Schoonmaker (SEAL)

A. D. Atwell (SEAL)

THE STATE OF DELAWARE)
COUNTY OF NEW CASTLE)

ss:

BE IT REMEMBERED that on this 26th day of February, A. D. 1960,
personally came before me, a Notary Public for the State of Delaware, R. F.
Westover, L. A. Schoonmaker and A. D. Atwell, all of the parties to the fore-
going Certificate of Incorporation, known to me personally to be such, and
severally acknowledged the said Certificate to be the act and deed of the
signers respectively and that the facts therein stated are truly set forth.

GIVEN under my hand and seal of office the day and year aforesaid.

Howard K. Webb

Notary Public

Howard K. Webb
Notary Public
Appointed June 27, 1958
State of Delaware
Term Two Years

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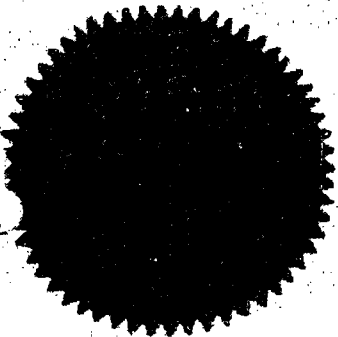
State of Delaware



Office of Secretary of State

I, Elisha C. Dukes, Secretary of State of the State of Delaware,
do hereby certify that the above and foregoing is a true and correct copy of
Certificate of Amendment of the "TENNECO OIL COMPANY", as received
and filed in this office the first day of May, A. D. 1961, at 10
o'clock A.M.

In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this first day
of May in the year of our Lord
one thousand nine hundred and sixty-one.



Elisha C. Dukes

Secretary of State

L. F. Houns

Asst. Secretary of State

P

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
TENNECO OIL COMPANY

- - - -

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That the Board of Directors of said corporation, at a meeting duly convened and held, adopted a Resolution proposing and declaring advisable the following Amendment to the Certificate of Incorporation of said corporation:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "FOURTH" so that, as amended, said Article shall read as follows:

"FOURTH. The total number of shares which the corporation shall have authority to issue is One Million (1,000,000); and the Par Value of each of said shares is Five Dollars (\$5.00), amounting in the aggregate to Five Million Dollars (\$5,000,000.00)."

SECOND: That the said Amendment has been consented to and authorized by the holders of all the issued and outstanding stock, entitled to vote, by a written consent given in accordance with the provisions of Section 228 of the General Corporation Law of Delaware, and filed with the corporation on the 27th day of April, 1961.

THIRD: That the aforesaid Amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of Delaware.

FOURTH: That said Amendment does not affect any change in the Issued shares of said corporation.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by Cecil C. Johnson, its Vice President, and L. R. Spence, its Assistant Secretary, this the 27th day of April, 1961.

TENNECO OIL COMPANY

BY Cecil C. Johnson
Vice President

TENNECO OIL COMPANY
DELAWARE
CORPORATE
1960
SEAL

BY L. R. Spence
Assistant Secretary

THE STATE OF TEXAS
COUNTY OF HARRIS

ss:

BE IT REMEMBERED that on this 27th day of April, A. D., 1961, personally came before me, a Notary Public in and for the County and State aforesaid, Cecil C. Johnson, Vice President of TENNECO OIL COMPANY, a corporation of the State of Delaware, the corporation described in and which executed the foregoing Certificate, known to me personally to be such, and he, the said Cecil C. Johnson as such Vice President, duly executed said Certificate before me and acknowledged the said Certificate to be his act and deed and the act and deed of said corporation; that the signatures of the said Vice President and of the Assistant Secretary of said

Corporation to said foregoing Certificate are in the handwriting of the said Vice President and Assistant Secretary of said Corporation respectively, and that the seal affixed to said Certificate is the common or corporate seal of said Corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office the day and year aforesaid.

NOTARY PUBLIC
COUNTY OF HARRIS, TEXAS

My Commission expires:
June 1, 1961

Elois B. Weatherall
Notary Public in and for
Harris County, Texas

Elois B. Weatherall
Notary Public in and for
Harris County, Texas
My Commission Expires
June 1, 1961

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION
OF
TENNECO OIL COMPANY

- - - -

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST, That the Board of Directors of said corporation, at a meeting duly convened and held, adopted a Resolution proposing and declaring advisable the following Amendment to the Certificate of Incorporation of said corporation:

RESOLVED, that the Certificate of Incorporation of this corporation be amended by changing the Article thereof numbered "FOURTH" so that, as amended, said Article shall read as follows:

"FOURTH. The total number of shares which the corporation shall have authority to issue is Fifty Thousand (50,000); and the Par Value of each of said shares is One Hundred Dollars (\$100), amounting in the aggregate to Five Million Dollars (\$5,000,000)."

SECOND: That the said Amendment has been consented to and authorized by the holders of all the issued and outstanding stock, entitled to vote, by a written consent given in accordance with the provisions of Section 228 of the General Corporation Law of Delaware, and filed with the corporation on the 13th day of October, 1961.

THIRD: That the aforesaid Amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of Delaware.

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TGP0004169
EPR0001222

FOURTH: The capital of said corporation will not be reduced under or by reason of the Amendment.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by Cecil C. Johnson, its Vice President, and L. R. Spence, its Assistant Secretary, this the 13th day of October, 1961.

TENNECO OIL COMPANY
1960
CORPORATE
SEAL
DELAWARE

TENNECO OIL COMPANY

By Cecil C. Johnson
Vice President

By L. R. Spence
Assistant Secretary

THE STATE OF TEXAS
COUNTY OF HARRIS

ss:

BE IT REMEMBERED that on this 13th day of October, A. D. 1961, personally came before me, a Notary Public in and for the County and State aforesaid, Cecil C. Johnson, Vice President of TENNECO OIL COMPANY, a corporation of the State of Delaware, the corporation described in and which executed the foregoing Certificate, known to me personally to be such, and he, the said Cecil C. Johnson as such Vice President, duly executed said Certificate before me and acknowledged the said Certificate to be his act and deed and the act and deed of said corporation; that the signatures of the said Vice President and of the Assistant Secretary of said corporation to said foregoing Certificate are in the handwriting of the said Vice President and Assistant Secretary of said corporation respectively, and that the seal affixed to

said Certificate is the common or corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of
office the day and year aforesaid.

NOTARY PUBLIC
COUNTY OF HARRIS, TEXAS

Shirley B. Metz
Notary Public in and for
Harris County, Texas

My Commission expires: Shirley B. Metz
June 1, 1963 Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1963

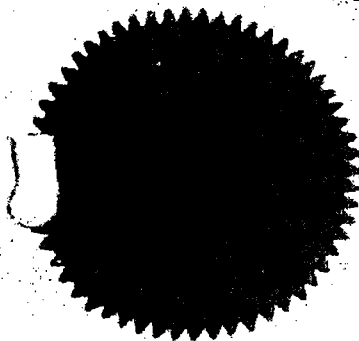
State of Delaware



Office of Secretary of State

A. Elisha C. Dukes, Secretary of State of the State of Delaware,
do hereby certify that the above and foregoing is a true and correct copy of
Certificate of Amendment of the "TENNECO OIL COMPANY", as received and filed
in this office the nineteenth day of October, A.D. 1961, at 10 o'clock A.M.

In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this nineteenth day
of October in the year of our Lord
one thousand nine hundred and sixty-one.



A. Elisha C. Dukes

Secretary of State

D. F. Jones

Asst. Secretary of State



Office of Secretary of State

J. Elisha C. Baker, Secretary of State of the State of Delaware,
do hereby certify that the Certificate of Ownership of the "TENNECO OIL
COMPANY", merging the "WILCOX OIL COMPANY", pursuant to Section 253 of
the General Corporation Law of the State of Delaware, was received and
filed in this office the ninth day of September, A.D. 1955, at 10
o'clock A.M.;

And I do hereby further certify that upon the filing of the
aforesaid Certificate of Ownership the corporate existence of the "WILCOX
OIL COMPANY", terminated.

In Testimony Whereof, I have hereunto set my hand

and official seal at Dover this tenth day of
September in the year of our Lord one thousand
nine hundred and sixty-five.



Elisha C. Baker

Secretary of State

W. F. Brown

Asst. Secretary of State

CERTIFICATE OF
OWNERSHIP AND MERGER
MERGING WILCOX OIL COMPANY
INTO TENNECO OIL COMPANY

-oOo-

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Laws of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of Wilcox Oil Company, a Delaware corporation.

SECOND: That, in accordance with the provisions of Title 8, Section 253 of The Delaware Code, the Board of Directors of Tenneco Oil Company, at a meeting duly convened and held on September 7, 1965, adopted the following resolutions to merge Wilcox Oil Company into Tenneco Oil Company:

"WHEREAS, Tenneco Oil Company owns all the issued and outstanding stock of Wilcox Oil Company, a Delaware corporation; and

WHEREAS, it is deemed desirable to merge Wilcox Oil Company into Tenneco Oil Company;

NOW, THEREFORE, BE IT

RESOLVED, that Tenneco Oil Company merge into itself, and it does hereby merge into itself, Wilcox Oil Company and assumes all of the liabilities and obligations of said Wilcox Oil Company; and further

THE STATE OF TEXAS §
 :
COUNTY OF HARRIS §

ss:

BE IT REMEMBERED that on this 7th day of September, 1965, personally came before me, a Notary Public in and for the County and State aforesaid, W. E. SCOTT, President of TENNECO OIL COMPANY, a corporation of the State of Delaware, the corporation described in and which executed the foregoing certificate, known to me personally to be such, and he, the said W. E. SCOTT, as such President, duly executed said Certificate before me and acknowledged the said Certificate to be his act and deed and the act and deed of said corporation; that the signatures of the said President and of the Secretary of said corporation to said foregoing Certificate are in the handwriting of the said President and Secretary of said corporation respectively, and that the seal affixed to said Certificate is the common or corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office the day and year aforesaid.

NOTARY PUBLIC
SEAL
County of Harris, Texas

Elizabeth M. Forsythe
Elizabeth M. Forsythe, Notary Public in
and for Harris County, Texas

My Commission Expires June 1, 1967.

RESOLVED, that the President, or a Vice President, and the Secretary, or Treasurer, or an Assistant Secretary, or an Assistant Treasurer, of this Company, be, and they hereby are, authorized and directed to make and execute, under the corporate seal of this Company, a Certificate of Ownership and Merger and to file and record the same in the State of Delaware pursuant to Title 8, Section 253 of The Delaware Code; and further

RESOLVED, that the officers of this Company be, and they hereby are, authorized to do all acts and things which may be necessary or proper to effect said merger and to transfer title of the properties of Wilcox Oil Company to Tenneco Oil Company."

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by W. E. SCOTT, its President, and L. R. SPENCE, its Secretary, this 7th day of September, 1965.

TENNECO OIL COMPANY

By W. E. Scott
President

TENNECO OIL COMPANY
CORPORATE
SEAL
DELAWARE
1960

By L. R. Spence
Secretary

Executed Copy

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

ATLANTIC COAST TERMINALS, INC.

INTO

TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under the laws of Delaware,

DOES HEREBY CERTIFY:

FIRST: That this corporation was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware.

SECOND: That this corporation owns all of the outstanding shares of the stock of Atlantic Coast Terminals, Inc., a corporation incorporated on the 22nd day of January, 1946, pursuant to the General Corporation Law of the State of Maryland.

THIRD: That this corporation, by the following resolutions of its Board of Directors, duly adopted at a meeting held on the 17th day of January, 1967, determined to and did merge into itself said Atlantic Coast Terminals, Inc.:

RESOLVED, that Tenneco Oil Company merge, and it hereby does merge into itself said Atlantic Coast Terminals, Inc., and assumes all of its obligations; and

FURTHER RESOLVED, that the merger shall be effective upon filing with the Secretary of State of Delaware and upon recording a certified copy in the office of the Recorder of Deeds of New Castle County; and

FURTHER RESOLVED, that the proper officers of this corporation be and they hereby are directed to make and execute, under the corporate seal of this corporation, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Atlantic Coast Terminals, Inc. and assume its liabilities and obligations, and the date of adoption thereof.

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and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

FOURTH: That this corporation survives the merger and may be served with process in the State of Delaware in any proceeding for enforcement of any obligation of Atlantic Coast Terminals, Inc. as well as for enforcement of any obligation of the surviving corporation arising from the merger, including any suit or other proceeding to enforce the right of any stockholder as determined in appraisal proceedings pursuant to the provisions of section 262 of Title 8 of the Delaware Code of 1953, and it does hereby irrevocably appoint the Secretary of State of Delaware as its agent to accept service of process in any such suit or other proceeding. The address to which a copy of such process shall be mailed by the Secretary of State of Delaware is c/o The Corporation Trust Company, 100 West Tenth Street, Wilmington, Delaware 19801, until the surviving corporation shall have hereafter designated in writing to the said Secretary of State a different address for such purpose. Service of such process may be made by personally delivering to and leaving with the Secretary of State of Delaware duplicate copies of such process, one of which copies the Secretary of State of Delaware shall forthwith send by registered mail to Tenneco Oil Company at the above address.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused its corporate seal to be affixed and this certificate to be signed by G. H. Meason, its Vice President, and L. R. Spence, its Secretary, this 17th day of January, A.D., 1967.

TENNECO OIL COMPANY

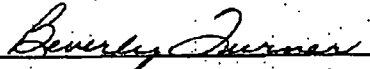
By G. H. Meason
G. H. Meason, Vice President

By L. R. Spence
L. R. Spence, Secretary

STATE OF TEXAS)
) ss:
COUNTY OF HARRIS)

BE IT REMEMBERED that on this 17th day of January, A. D., 1967,
personally came before me, Beverly Turner a Notary Public in and for the
County and State aforesaid, G. H. Meason, Vice President of Tenneco Oil
Company, a corporation of the State of Delaware, the corporation described
in and which executed the foregoing certificate, known to me personally to
be such, and he, the said G. H. Meason, as such Vice President, duly executed
said certificate before me and acknowledged the said certificate to be his
act and deed and the act and deed of said corporation; that the signatures
of said Vice President and of the Secretary of said corporation to said
foregoing certificate are in the handwriting of the said Vice President and
Secretary of said corporation respectively, and that the seal affixed to
said certificate is the common or corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office
the day and year aforesaid.



BEVERLY TURNER
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1967

TGP0004179

TGP0004179
EPR0001232

State of Delaware



Office of Secretary of State

J. Elisha C. Duken, Secretary of State of the State of Delaware,
do hereby certify that the above and foregoing is a true and correct copy of
Certificate of Ownership of the "TENNECO OIL COMPANY", a corporation
organized and existing under the laws of the State of Delaware, merging
the "ATLANTIC COAST TERMINALS, INC.", a corporation organized and
existing under the laws of the State of Maryland, pursuant to Section
253 of the General Corporation Law of the State of Delaware, as received
and filed in this office the twentieth day of January, A.D. 1967, at
10 o'clock A.M.

In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this twentieth day
of January in the year of our Lord
one thousand nine hundred and sixty-seven.

Elisha C. Duken

Secretary of State

J. H. Glavin

Asst. Secretary of State

FORM 120

TGP0004180

TGP0004180
EPR0001233

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

KERN-BOQUILLAS COMPANY

INTO

TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under the laws of Delaware, DOES HEREBY CERTIFY:

FIRST: That this Corporation was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware.

SECOND: That this Corporation owns all of the outstanding shares of the stock of Kern-Boquillas Company, a corporation incorporated on the 17th day of September, 1928, pursuant to the General Corporation Law of the State of California.

THIRD: That this Corporation, by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members on the 28th day of August, 1969, determined to and did merge into itself said Kern-Boquillas Company:

RESOLVED, that Tenneco Oil Company merge, and it hereby does merge into itself Kern-Boquillas Company, a California corporation, and assumes all of its liabilities and obligations; and

FURTHER RESOLVED, that the merger shall be effective upon filing a Certificate of Ownership and Merger with the Secretary of State of Delaware; and

REC-4101 PAGE 481

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EPR0001234

FURTHER RESOLVED, that the proper officers of this Corporation be, and they hereby are, directed to make and execute under the corporate seal of this corporation, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Kern-Boquillas Company and assume its liabilities and obligations, and the date of adoption thereof and to cause the same to be filed in the manner provided by law, and to do all acts and things whatsoever whether within or without the State of Delaware which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused its corporate seal to be affixed and this certificate to be signed by E. L. Capps, its Vice President, and attested by L. R. Spence, its Secretary, this 28th day of August, 1969.

TENNECO OIL COMPANY

BY

E. L. Capps
Vice President

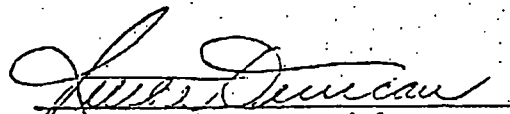
ATTEST:

L. R. Spence
Secretary

STATE OF TEXAS)
) ss:
COUNTY OF HARRIS)

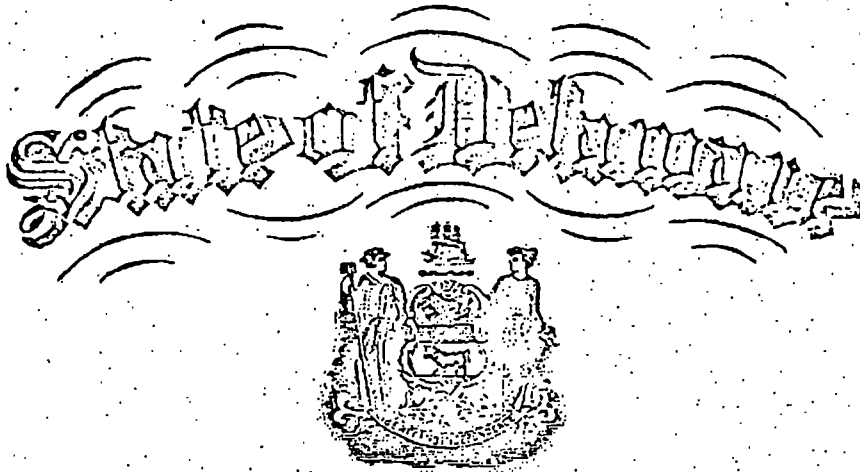
BE IT REMEMBERED on this 28th day of August, 1969, personally came before me, a Notary Public in and for the County and State aforesaid, E. L. Capps, Vice President of Tenneco Oil Company, a corporation of the State of Delaware, and he duly executed said Certificate before me and acknowledged said Certificate to be his act and deed and the act and deed of said Corporation, and the facts stated therein are true; and that the seal affixed to said Certificate and attested by the Secretary of said Corporation is the common or corporate seal of said Corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office the day and year aforesaid.


Notary Public in and for
Harris County, Texas

My Commission Expires
June 1, 1971.

1b



Office of Secretary of State

J. Eugene Brunting, Secretary of State of the State of Delaware,
do hereby certify that the above and foregoing is a true and correct copy of
Certificate of Ownership of the "TENNECO OIL COMPANY", a corporation
organized and existing under the laws of the State of Delaware, merging
the "KERN-BOQUILLAS COMPANY", a corporation organized and existing under
the laws of the State of California, pursuant to Section 253 of the
General Corporation Law of the State of Delaware, as received and filed
in this office the second day of September, A.D. 1969, at 10 o'clock A.M.

In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this second day
of September in the year of our Lord
one thousand nine hundred and sixty-nine.

Eugene Brunting

Secretary of State

R. H. Caldwell

Asst. Secretary of State

FORM 121

REC'D FOR RECORD *Sent 2* 1969 LEO J. DUGAN, Jr. Recorder

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The Corp. 7/66
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Certified Copy

PAGE 1
INDEXED

CERTIFICATE OF OWNERSHIP AND MERGER
OF

TEHNICO OIL COMPANY (DEL. DOM.)

MERGING

KERN-BOSQUILLAS COMPANY (CALIF. DOM.)

RECEIVED FOR RECORD

SEP 2 1969

LEO J. DUGAN, Jr., Recorder

STATE OF DELAWARE,
NEW CASTLE COUNTY,

SS.

FILED

SEP 2 1969

Recorded in the Recorder's Office at

Wilmington, in INCORPORATION Record N. Corp. Vol. 2101

Page 481 &c, the 2nd day of Sept

A. D. 1969

SECRETARY OF STATE

Witness my hand and official seal.

10 AM

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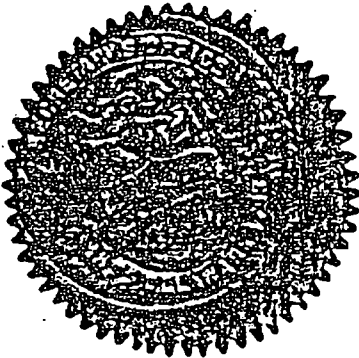
State of DELAWARE

Office of SECRETARY OF STATE

*I, Robert H. Reed, Secretary of State of the State of Delaware,
do hereby certify that the above and foregoing is a true and correct copy of*

Certificate of Ownership of the "TENNECO OIL COMPANY", merging "TENNESSEE GAS
SUPPLY COMPANY", pursuant to Section 253 of the General Corporation Law of the
State of Delaware, as received and filed in this office the twenty-fifth day
of November, A.D. 1974, at 10 o'clock A.M.

In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this twenty-fifth day
of November in the year of our Lord
one thousand nine hundred and seventy-four.



Robert H. Reed

Robert H. Reed

Secretary of State

Grover A. Biddle

Grover A. Biddle Assistant Secretary of State

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

TENNESSEE GAS SUPPLY COMPANY

INTO

TENNECO OIL COMPANY

TENNECO OIL COMPANY (the "Company"), a corporation organized and existing under the laws of Delaware,

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of Delaware.

SECOND: That the Company owns all of the outstanding shares of capital stock of TENNESSEE GAS SUPPLY COMPANY, a corporation incorporated on the 22nd day of July, 1960, pursuant to the provisions of the laws of the State of Delaware.

THIRD: That the Company, by the following resolutions duly adopted by its Board of Directors on the 18th day of November, 1974, determined to and did merge into itself said Tennessee Gas Supply Company.

RESOLVED, that the Company does hereby liquidate and merge into itself Tennessee Gas Supply Company, a Delaware corporation, and assumes all of its liabilities and obligations;

and it is further

RESOLVED, that the liquidation and merger shall become effective upon the date of filing of an appropriate certificate of ownership and merger with the Secretary of State of the State of Delaware;

and it is further

RESOLVED, that the President or any Vice President and the Secretary or any Assistant Secretary of the Company be, and they hereby are, directed to make and execute a Certificate of Ownership and Merger setting forth a copy of these resolutions to so liquidate and merge said Tennessee Gas Supply Company and to assume its liabilities and obligations, and the date of adoption thereof, and to cause the same to be filed with the Secretary of State of the State of Delaware and a certified copy recorded in the office of the Recorder of Deeds of New Castle County, Delaware, and to do all acts and things whatsoever whether within or without the State of Delaware, which may be necessary or proper to effect said liquidation and merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by Joe B. Foster its Senior Vice President, and attested by L. R. Spence, its Secretary, this 18th day of November 1974.

TENNECO OIL COMPANY

By Joe B. Foster
Senior Vice President

ATTEST:

L. R. Spence
Secretary

STATE OF TEXAS

COUNTY OF HARRIS

SS.

BE IT REMEMBERED, that on this 18th day of November, 1974, personally came before me, a Notary Public in and for the County and State aforesaid, Joe B. Foster, Senior Vice President of Tenneco Oil Company, a corporation of the State of Delaware, and he duly executed said certificate before me and acknowledged the said certificate to be his act and deed and the act and deed of said corporation

and the facts stated therein to be true; and that the seal affixed to said certificate and attested to by the Secretary of said corporation is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office the day and year aforesaid.



G. H. SMITH

Notary Public in and for Harris County, Texas

My Commission Expires June 1, 1975

PLEASE RETURN TO
THE CORPORATION TRUST COMPANY

Certified Copy

CERTIFICATE OF OWNERSHIP AND MERGER

OF

TENNECO OIL COMPANY (DEL. DOM.)

MERGING

THE TENNESSEE GAS SUPPLY COMPANY (DEL. DOM.)

RECEIVED FOR RECORD

NOV 25 1974

LEO L. DUGAN, Jr. Secretary

RECORDED & INDEXED

FILED

NOV 25 1974

10 AM

[Signature]
SECRETARY OF STATE

STATE OF DELAWARE
NEW CASTLE COUNTY

Recorded in the Recorder's Office

Page 369

of 381

day of

Nov 1974

A.D. 1974

Witness my hand and seal

of the

Recorder

[Handwritten signature]



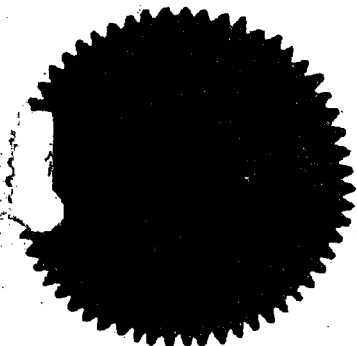
State of DELAWARE

Office of SECRETARY OF STATE

*I, Robert H. Reed, Secretary of State of the State of Delaware,
to hereby certify that the above and foregoing is a true and correct copy of*

Certificate of Ownership of the "TENNECO OIL COMPANY", merging "TENNECO LT
CORPORATION", pursuant to Section 253 of the General Corporation Law of the State
of Delaware, as received and filed in this office the eleventh day of December,
A.D. 1974, at 10 o'clock A.M.

In Testimony Whereof, *I have hereunto set my hand
and official seal at Dover this* eleventh *day*
of December *in the year of our Lord*
one thousand nine hundred and seventy-four.



Robert H. Reed

Robert H. Reed

Secretary of State

Grover A. Biddle

Grover A. Biddle Assistant Secretary of State

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

TENNECO LT CORPORATION

INTO

TENNECO OIL COMPANY

* * * * *

TENNECO OIL COMPANY (the "Company"), a corporation organized and existing under the laws of Delaware,

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of Delaware.

SECOND: That the Company owns all of the outstanding shares of capital stock of TENNECO LT CORPORATION, a corporation incorporated on the 15th day of November, 1974, pursuant to the provisions of the laws of the State of Delaware.

THIRD: That the Company, by the following resolutions duly adopted by its Board of Directors on the 11th day of December, 1974, determined to and did merge into itself said Tenneco LT Corporation.

RESOLVED, that the Company does hereby liquidate and merge into itself Tenneco LT Corporation, a Delaware corporation, and assumes all of its liabilities and obligations.

and it is further

RESOLVED, that the liquidation and merger shall become effective upon the date of filing of an appropriate certificate of ownership and merger with the Secretary of State of the State of Delaware;

and it is further

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EPR0001245

RESOLVED, that the President or any Vice President and the Secretary or any Assistant Secretary of the Company be, and they hereby are, directed to make and execute a Certificate of Ownership and Merger setting forth a copy of these resolutions to so liquidate and merge said Tenneco LT Corporation and to assume its liabilities and obligations, and the date of adoption thereof, and to cause the same to be filed with the Secretary of State of the State of Delaware and a certified copy recorded in the office of the Recorder of Deeds of New Castle County, Delaware, and to do all acts and things whatsoever whether within or without the State of Delaware, which may be necessary or proper to effect said liquidation and merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by Joe B. Foster its Senior Vice President, and attested by L. R. Spence, its Secretary, this 11th day of December 1974.

TENNECO OIL COMPANY

TENNECO OIL COMPANY
DELAWARE
1960
SEAL
CORPORATE SEAL

By Joe B. Foster
Senior Vice President

ATTEST:

By L. R. Spence
Secretary

STATE OF TEXAS |
COUNTY OF HARRIS | SS.

BE IT REMEMBERED, that on this 11th day of December, 1974, personally came before me, a Notary Public in and for the County and State aforesaid, Joe B. Foster, Senior Vice President of Tenneco Oil Company, a corporation of the State of Delaware, and he duly executed said certificate before me and acknowledged the said certificate to be his act and deed and the act and deed of said corporation, and the facts stated therein to be true; and that the seal affixed to said certificate and attested to by the Secretary of said corporation is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office the day and year aforesaid.

NOTARIAL SEAL

NOTARY PUBLIC
COUNTY OF HARRIS, TEXAS

G. H. Smith
G. H. SMITH
Notary Public in and for Harris County, Texas
My Commission Expires June 1, 1975



State of DELAWARE

Office of SECRETARY OF STATE

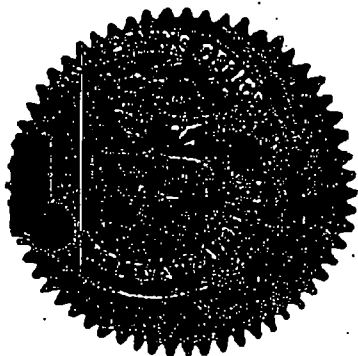
I, Robert H. Reed, Secretary of State of the State of Delaware,
do hereby certify that the above and foregoing is a true and correct copy of
Certificate of Ownership of the "TENNECO OIL COMPANY", merging "LA-TERRE CO.,
INC." and "LA TERRE PETROLEUM CORP.", pursuant to Section 253 of the General
Corporation Law of the State of Delaware, as received and filed in this office
the twenty-sixth day of February, A.D. 1975, at 10 o'clock A.M.

In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this twenty-sixth day
of February in the year of our Lord
one thousand nine hundred and seventy-five.

Robert H. Reed

Secretary of State

Grover A. Biddle Assistant Secretary of State



CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

VOL. 118 PAGE 522

LA-TERRE CO., INC. AND LA TERRE PETROLEUM CORP.

INTO

TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing
under the laws of Delaware

DOES HEREBY CERTIFY:

FIRST: That this corporation was incorporated on the 26th day
of February, 1960, pursuant to the General Corporation Law of the State of
Delaware.

SECOND: That this corporation owns all of the outstanding shares
of the stock of La-Terre Co., Inc. and La Terre Petroleum Corp., corporations
incorporated on the 25th day of October, 1926 and the 10th day of November,
1969, respectively, pursuant to the General Corporation Law of the State
of Delaware.

THIRD: That this corporation, by the following resolutions of
its Board of Directors, duly adopted on February 24, 1975 by unanimous
written consent of its directors filed with the minutes of its Board and
dated February 24, 1975, determined to and did liquidate and merge into
itself said La-Terre Co., Inc. and La Terre Petroleum Corp.:

RESOLVED, that Tenneco Oil Company liquidate
and merge, and it hereby does liquidate and merge into

itself its wholly owned subsidiaries, La-Terre Co., Inc. and La Terre Petroleum Corp., and assumes all of their obligations; and

FURTHER RESOLVED, that the merger shall be effective as of the close of business on February 28, 1975; and

FURTHER RESOLVED, that the proper officers of this corporation be and they hereby are directed to make and execute, under the corporate seal of this corporation, a Certificate of Ownership and Merger setting forth a copy of the resolutions to liquidate and merge said La-Terre Co., Inc. and said La Terre Petroleum Corp., assume their liabilities and obligations, and the date of adoption thereof, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused its corporate seal to be affixed and this certificate to be signed by A. R. Dudley, its Senior Vice President, and L. R. Spence, its Secretary, this 24th day of February, 1975.

TENNECO OIL COMPANY

By A. R. Dudley
A. R. Dudley, Senior Vice President

ATTEST:

L. R. Spence
L. R. Spence, Secretary

PLEASE RETURN TO
THE CORPORATION TRUST COMPANY

FEB 22 1975

Certified Copy

CERTIFICATE OF OWNERSHIP AND MEMBERSHIP
OF

TERRACO OIL COMPANY (DEL. DOM.)

Merging

1. TERRE CO., INC. (DEL. DOM.)

2. TERRE PETROLEUM CORP. (DEL. DOM.)

STATE OF DELAWARE
CASTLE COUNTY

FILED

FEB 26 1975

Robert H. [Signature]

SECRETARY OF STATE

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TGP0004197
EPR0001250



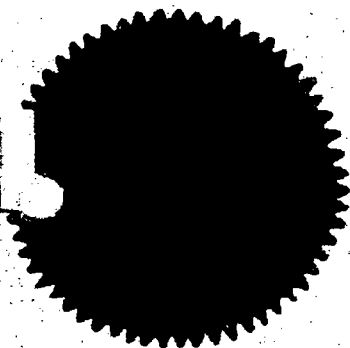
State of DELAWARE

Office of SECRETARY OF STATE

I, Robert H. Reed, Secretary of State of the State of Delaware,

do hereby certify that the above and foregoing is a true and correct copy of
Certificate of Ownership of the "TENNECO OIL COMPANY", a corporation
organized and existing under the laws of the State of Delaware, merging
"LaTERRE PETROLEUM OF NORWAY, INC." and "LaTERRE PETROLEUM OF INDONESIA,
INC.", corporations organized and existing under the laws of the State
of Louisiana, pursuant to Section 253 of the General Corporation Law of
the State of Delaware, as received and filed in this office the twenty-
first day of May, A.D. 1976, at 10 o'clock A.M.

In Testimony Whereof, I have hereunto set my hand
and official seal at Dover this eighteenth day
of June in the year of our Lord
one thousand nine hundred and seventy-six.



Robert H. Reed

Robert H. Reed

Secretary of State

Grover A. Biddle

Grover A. Biddle Assistant Secretary of State

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

LaTERRE PETROLEUM OF NORWAY, INC. AND
LaTERRE PETROLEUM OF INDONESIA, INC.

INTO

TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing
under the laws of Delaware.

DOES HEREBY CERTIFY:

FIRST: That this corporation was incorporated on the 26th day
of February, 1960, pursuant to the General Corporation Law of the State
of Delaware.

SECOND: That this corporation owns all of the outstanding
shares of the stock of LaTerre Petroleum of Norway, Inc. and LaTerre
Petroleum of Indonesia, Inc., corporations Incorporated on the 27th
day of December, 1972 and the 22nd day of February, 1973, respectively,
pursuant to the Business Corporation Law of the State of Louisiana.

THIRD: That this corporation, by the following resolutions of
its Board of Directors, duly adopted on May 17, 1976 by unanimous
written consent of its directors filed with the minutes of its Board
and dated May 17, 1976, determined to and did liquidate and merge into
itself said LaTerre Petroleum of Norway, Inc. and La Terre Petroleum of
Indonesia, Inc.:

RESOLVED, that Tenneco Oil Company liquidate and merge, and it hereby does liquidate and merge into itself its wholly owned subsidiaries, LaTerre Petroleum of Norway, Inc. and LaTerre Petroleum of Indonesia, Inc., and assumes all of their obligations; and

FURTHER RESOLVED, that the merger shall be effective as of the close of business on May 31, 1976; and

FURTHER RESOLVED, that the proper officers of this corporation be and they hereby are directed to make and execute, under the corporate seal of this corporation, a Certificate of Ownership and Merger setting forth a copy of the resolutions to liquidate and merge said LaTerre Petroleum of Norway, Inc. and LaTerre Petroleum of Indonesia, Inc., assume their liabilities and obligations, and the date of adoption thereof, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused its corporate seal to be affixed and this certificate to be signed by

Joe B. Foster, its Executive Vice President, and L. R. Spence, its
Secretary, this 17th day of May, 1976.

TENNECO OIL COMPANY

By Joe B. Foster
Joe B. Foster
Executive Vice President

ATTEST:

L. R. Spence
L. R. Spence Secretary

State of Delaware



Office of Secretary of State

I, GLENN C. KENTON, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING TENNESSEE PRODUCTION COMPANY A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE SIXTEENTH DAY OF JULY, A.D. 1984, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

I I I I I I I I I I


Glenn C. Kenton, Secretary of State

AUTHENTICATION: 10289014

DATE: 07/19/1984

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TGP0004202
TGP0004202
EPR0001255

BOOK 0154 PAGE 0239

FILED

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

JUL 16 1984

TENNESSEE PRODUCTION COMPANY

INTO

TENNECO OIL COMPANY

10 A.M.
Miss C. K. [Signature]
SECRETARY OF STATE

* * * * *

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 100 West Tenth Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of Tennessee Production Company, a corporation incorporated on the 7th day of January, 1955, pursuant to the General Corporation Law of the State of Delaware.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 13th day of June, 1984, determined to and did merge into itself the said Tennessee Production Company:


RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Tennessee Production Company and assume all of said corporation's liabilities and obligations; and it is further

TGP0004203
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EPR0001256

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Tennessee Production Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Tennessee Production Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by Philip Oxley, its President, and attested by Karl A. Stewart, its Secretary, this 29th day of June, 1984.

TENNECO OIL COMPANY

By 
Philip Oxley, President

ATTEST:

By 
Karl A. Stewart, Secretary

RECEIVED FOR RECORD

JUL 16 1984

LEO J. DUCAN, Jr., Recorder

0835P/4



Office of Secretary of State

I, GLENN C. KENTON, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING Q-S PETROLEUM, INC. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE NINETEENTH DAY OF DECEMBER, A.D. 1984, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

1 1 1 1 1 1 1 1 1 1


Glenn C. Kenton, Secretary of State

AUTHENTICATION: 10402213
DATE: 12/20/1984

843540139

TGP0004205
TGP0004205
EPR0001258

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

Q-S PETROLEUM, INC.

INTO

TENNECO OIL COMPANY

* * * * *

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at Corporation Trust Center, The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of Q-S Petroleum, Inc., a corporation incorporated on the 19th day of January, 1967, pursuant to the General Corporation Law of the State of Delaware.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 28th day of November, 1984, determined to and did merge into itself the said Q-S Petroleum, Inc.:

"RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Q-S Petroleum, Inc. and assume all of said corporation's liabilities and obligations; and it is further

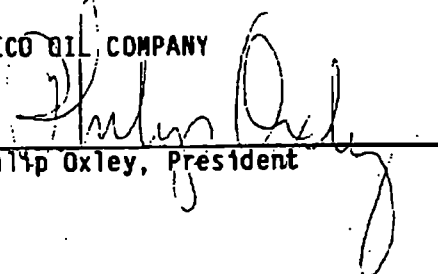
P

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Q-S Petroleum, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Q-S Petroleum, Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger."

P

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by Philip Oxley, its President, and attested by Karl A. Stewart, its Secretary, this 28th day of November, 1984.

TENNECO OIL COMPANY

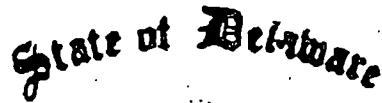
By 
Philip Oxley, President

ATTEST:

By 

Karl A. Stewart, Secretary

0835P/8



Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING DIRECT OIL CORPORATION A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE EIGHTH DAY OF JULY, A.D. 1985, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

1 2 3 4 5 6 7 8 9 10


Michael Harkins, Secretary of State

AUTHENTICATION: 10563649

DATE: 07/17/1985

851 890300

TGP0004208
TGP0004208
EPR0001261

0265 315

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

DIRECT OIL CORPORATION

INTO

TENNECO OIL COMPANY

* * * * *

FILED

JUL 8 1985

John G. ...

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of Direct Oil Corporation, a corporation incorporated on the 21st day of June, 1961, pursuant to the General Corporation Law of the State of Delaware.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 11th day of June, 1985, determined to and did merge into itself the said Direct Oil Corporation:

"RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Direct Oil Corporation and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporation seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Direct Oil Corporation into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Direct Oil Corporation, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger."

FOURTH: This Certificate shall become effective on July 15, 1985, notwithstanding the fact that it may be filed with the Secretary of State of the State of Delaware on an earlier date as permitted by Section 103(d) of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by Philip Oxley, its President, and attested by Karl A. Stewart, its Secretary, this 2nd day of July, 1985.

TENNECO OIL COMPANY

By Philip Oxley
Philip Oxley, President

ATTEST*

By: Karl A. Stewart

Karl A. Stewart, Secretary

0709I

RECEIVED FOR RECORD

JUL 8 1985

LEO J. DUGAN, Jr., Recorder

**PLEASE RETURN TO
THE CORPORATION TRUST COMPANY**

RECEIVED FOR RECORD

JUL 08 1985

LEO J. DUGAN, Jr., Recorder

21
**TGP0004211
TGP00042
EPR000**

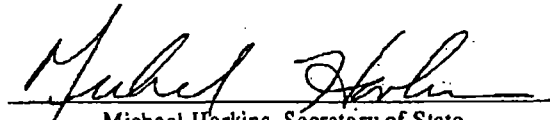


Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING LATERRE PETROLEUM OF ITALY, INC. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF LOUISIANA, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-THIRD DAY OF DECEMBER, A.D. 1985, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

|||||||


Michael Harkins, Secretary of State

AUTHENTICATION: 10692577

DATE: 12/24/1985

725357093

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

LATERRE PETROLEUM OF ITALY, INC.

INTO

TENNECO OIL COMPANY

* * * * *

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of LaTerre Petroleum of Italy, Inc., a corporation incorporated on the 13th day of February, 1973, pursuant to the General Corporation Law of the State of Louisiana.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 21st day of November, 1985, determined to and did merge into itself the said LaTerre Petroleum of Italy, Inc.:

"RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary LaTerre Petroleum of Italy, Inc. and assume all of said corporation's liabilities and obligations; and it is further

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EPR0001266

RESOLVED, that the proper officers of the Company be,
and they hereby are, authorized, empowered and directed to
execute, under the corporate seal of the Company, a
Certificate of Ownership and Merger setting forth a copy of
the resolutions to merge said LaTerre Petroleum of Italy,
Inc. into the Company, pursuant to which the Company will
assume all of the liabilities and obligations of the said
LaTerre Petroleum of Italy, Inc., and to cause the same to
be filed, in the manner provided by law, and to do all acts
and things whatsoever, whether within or without the State
of Delaware, which may be in anywise necessary or proper to
effect said merger."

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this
certificate to be signed by E. J. Milan, its Vice President, and attested by
Karl A. Stewart, its Secretary, this 21st day of November, 1985.

TENNECO OIL COMPANY

By E. J. Milan
E. J. Milan, Vice President

ATTEST:

By Karl A. Stewart
Karl A. Stewart, Secretary

0835P/19

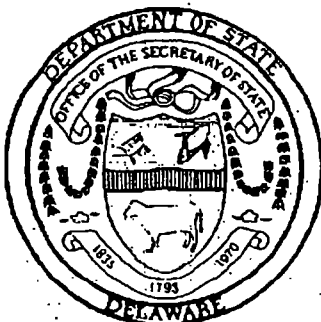


Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING TENNGASCO GAS PROCESSING COMPANY A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF LOUISIANA, PURSUANT TO SECTION 233 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-EIGHTH DAY OF FEBRUARY, A.D. 1986, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

|||||



726057066

Michael Harkins
Michael Harkins, Secretary of State

AUTHENTICATION: 10752047

DATE: 02/28/1986

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

TENNGASCO GAS PROCESSING COMPANY

INTO

TENNECO OIL COMPANY

*** * * * ***

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of Tenngasco Gas Processing Company, a corporation incorporated on the 25th day of October, 1978, pursuant to the Business Corporation Law of the State of Louisiana.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 31st day of January, 1986, determined to and did merge into itself the said Tenngasco Gas Processing Company:

"RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Tenngasco Gas Processing Company and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Tennasco Gas Processing Company Into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Tennasco Gas Processing Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger."

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by E. J. Milan, Its Vice President, and attested by Karl A. Stewart, Its Secretary, this 31st day of January, 1986.

TENNECO OIL COMPANY

By E. J. Milan
E. J. Milan, Vice President

ATTEST:

By Karl A. Stewart
Karl A. Stewart, Secretary

0835P/19

State of Delaware

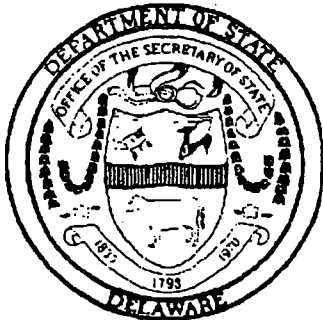
PAGE 1



Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING HOT OIL AND GAS COMPANY AND MOLTISTATE OIL PROPERTIES, INC. AND ONE INDEPENDENCE CORPORATION AND RESOURCE OIL AND GAS COMPANY CORPORATIONS ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-NINTH DAY OF APRIL, A.D. 1987, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.



877119082


Michael Harkins, Secretary of State

AUTHENTICATION: 11217774

DATE: 04/30/1987

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TGP0004218
EPR0001271

CERTIFICATE OF OWNERSHIP AND MERGER
MERGING

MULTISTATE OIL PROPERTIES, INC.,
HOT OIL AND GAS COMPANY,
ONE INDEPENDENCE CORPORATION
AND
RESOURCE OIL AND GAS COMPANY

INTO
TENNECO OIL COMPANY

* * * * *

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of Multistate Oil Properties, Inc., a corporation incorporated on the 19th day of November, 1985, pursuant to the General Corporation Law of the State of Delaware.

THIRD: That the Company owns all of the issued and outstanding shares of the capital stock of HOT Oil and Gas Company., a corporation incorporated on the 22nd day of July, 1975, pursuant to the General Corporation Law of the State of Delaware.

FOURTH: That the Company owns all of the issued and outstanding shares of the capital stock of One Independence Corporation, a corporation incorporated on the 29th day of October, 1982, pursuant to the General Corporation Law of the State of Delaware.

TGP0004219
TGP0004219
EPR0001272

FIFTH: That the Company owns all of the issued and outstanding shares of the capital stock of Resource Oil and Gas Company, a corporation incorporated on the 14th day of August, 1980, pursuant to the General Corporation Law of the State of Delaware.

SIXTH: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 31st day of March, 1987, determined to and did merge into itself the said Multistate Oil Properties, Inc.:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Multistate Oil Properties, Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger, which sets forth a copy of the resolutions to merge said Multistate Oil Properties, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Multistate Oil Properties, Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary HCT Oil and Gas Company and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger, which sets forth a copy of the resolutions to merge said HCT Oil and Gas Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said HCT Oil and Gas Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

* * *

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary One Independence Corporation and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the

Company, a Certificate of Ownership and Merger, which sets forth a copy of the resolutions to merge said One Independence Corporation into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said One Independence Corporation, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

* * *

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Resource Oil and Gas Company and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger, which sets forth a copy of the resolutions to merge said Resource Oil and Gas Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Resource Oil and Gas Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by E. J. Milan, its Senior Vice President and Chief Financial Officer, and attested by Karl A. Stewart, its Secretary, this 31st day of March, 1987.

TENNECO OIL COMPANY

By E. J. Milan
E. J. Milan, Senior Vice President
and Chief Financial Officer

ATTEST:

By Karl A. Stewart
Karl A. Stewart, Secretary

4748P

State of Delaware

16678



Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING DIRECT OIL CORPORATION OF TEXAS A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF TEXAS, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE EIGHTEENTH DAY OF MAY, A.D. 1987, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

| | | | |



877138082

A handwritten signature of Michael Harkins in dark ink.
Michael Harkins, Secretary of State

AUTHENTICATION: 11240848

DATE: 05/19/1987

TGP0004224
TGP0004224
EPR0001277

CERTIFICATE OF OWNERSHIP AND MERGER
MERGING
DIRECT OIL CORPORATION OF TEXAS
INTO
TENNECO OIL COMPANY

FILED
MAY 18 1987

10 AM

Charles H. Hale
SECRETARY OF STATE

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of Direct Oil Corporation of Texas, a corporation incorporated on the 2nd day of December, 1981, pursuant to the Business Corporation Act of the State of Texas.

THIRD: That the Company, by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 14th day of April, 1987, determined to and did merge into itself the said Direct Oil Corporation of Texas:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary DIRECT OIL CORPORATION OF TEXAS and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said DIRECT OIL CORPORATION OF TEXAS into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Direct Oil Corporation of Texas, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused this certificate to be signed by Neil H. McLaurin, its Vice President, and attested by Karl A. Stewart, its Secretary, this 14th day of April, 1987.

TENNECO OIL COMPANY

By Neil H. McLaurin
Neil H. McLaurin, Vice President

ATTEST:

By Karl A. Stewart
Karl A. Stewart, Secretary

RECEIVED FOR RECORD

MAY 20 1987

William M. Hooty, Recorder

4690P/4

State of Delaware

20491

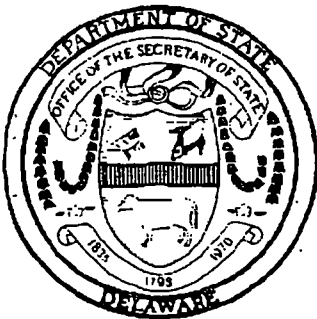


Office of Secretary of State


I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING GEO. OIL AND GAS COMPANY OF HOUSTON A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE FIRST DAY OF JUNE, A.D. 1987, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

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Michael Harkins, Secretary of State

AUTHENTICATION: 11281969

DATE: 06/18/1987

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TGP0004227
EPR0001280

FILED
JUN 1 1987
10 AM

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

GEO. OIL AND GAS COMPANY OF HOUSTON

INTO

TENNECO OIL COMPANY

* * * * *

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of GEO. Oil and Gas Company of Houston, a corporation incorporated on the 4th day of March, 1970, pursuant to the General Corporation Law of the State of Delaware.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 8th day of May, 1987, determined to and did merge into itself the said GEO. Oil and Gas Company of Houston:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary GEO. Oil and Gas Company of Houston and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger, which sets forth a copy of the resolutions to merge said GEO. Oil and Gas Company of Houston into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said GEO. Oil and Gas Company of Houston, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by E. J. Milan, its Senior Vice President and Chief Financial Officer, and attested by Karl A. Stewart, its Secretary, this 8th day of May, 1987.

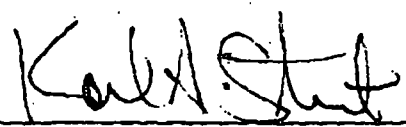
TENNECO OIL COMPANY

By


E. J. Milan, Senior Vice President
and Chief Financial Officer

ATTEST:

By


Karl A. Stewart, Secretary

4796P

RECEIVED FOR RECORD

JUN 19 1987

William M. Honey, Recorder

INDEXED

PLEASE RETURN TO
THE CORPORATION TRUST COMPANY

TGP0004230
TGP000423
EPR0001

State of Delaware



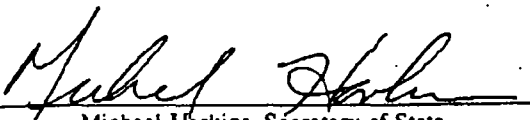
Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HERESY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING TLO OIL COMPANY A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-THIRD DAY OF JULY, A.D. 1987, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.



877204064


Michael Harkins, Secretary of State

AUTHENTICATION: 11333700

DATE: 07/24/1987

TGP0004231
TGP0004231
EPR0001284

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

TLC OIL COMPANY

INTO

TENNECO OIL COMPANY

* * * * *

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of TLC Oil Company, a corporation incorporated on the 27th day of March, 1967, pursuant to the General Corporation Law of the State of Delaware.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 24th day of June, 1987, determined to and did merge into itself the said TLC Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary TLC Oil Company and assume all of said corporation's liabilities and obligations; and it is further

TGP0004232
TGP0004232
EPR0001285

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger, which sets forth a copy of the resolutions to merge said TLC Oil Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said TLC Oil Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by Neil H. McLaurin, its Vice President, and attested by Karl A. Stewart, its Secretary, this 24th day of June, 1987.

TENNECO OIL COMPANY

ATTEST:

By Neil H. McLaurin
Neil H. McLaurin, Vice President

By

Karl A. Stewart
Karl A. Stewart, Secretary

21701/3



Office of Secretary of State

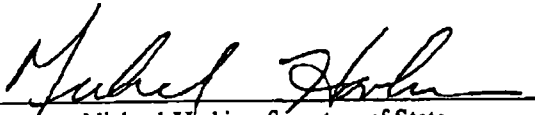
I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING SWL DEVELOPMENT CORP. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF TEXAS, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE THIRTY-FIRST DAY OF DECEMBER, A.D. 1987, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

1 1 1 1 1 1 1 1 1 1



738004049


Michael Harkins, Secretary of State

AUTHENTICATION:

11532625

DATE:

01/04/1988

TGP0004234
TGP0004234
EPR0001287

CERTIFICATE OF OWNERSHIP AND MERGER

MERGING

SWL DEVELOPMENT CORP.

INTO

TENNECO OIL COMPANY

* * * * *

TENNECO OIL COMPANY, a corporation organized and existing under the laws of the State of Delaware (the "Company"),

DOES HEREBY CERTIFY:

FIRST: That the Company was incorporated on the 26th day of February, 1960, pursuant to the General Corporation Law of the State of Delaware and maintains its registered office at The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801.

SECOND: That the Company owns all of the issued and outstanding shares of the capital stock of SWL Development Corp., a corporation incorporated on the 28th day of September, 1951, pursuant to the Texas Business Corporation Act of the State of Texas.

THIRD: That the Company by the following resolutions of its Board of Directors, duly adopted by the unanimous written consent of its members, filed with the minutes of said Board as of the 20th day of November, 1987 determined to and did merge into itself the said SWL Development Corp.:

"RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary SWL Development Corp. and assume all of said corporation's liabilities and obligations; and it is further

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EPR0001288

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger and Articles of Merger both setting forth a copy of the resolutions to merge said SWL Development Corp. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said SWL Development Corp., and to cause the same to be filed, in the manner provided by the laws of the States of Delaware and Texas, and to do all acts and things whatsoever, whether within or without the States of Delaware and Texas, which may be in anywise necessary or proper to effect said merger."

IN WITNESS WHEREOF, said Tenneco Oil Company has caused this certificate to be signed by C. W. Nance, its President, and attested by Karl A. Stewart, its Secretary, this 30th day of November, 1987.

TENNECO OIL COMPANY

By C. W. Nance
C. W. Nance, President

ATTEST:

By Karl A. Stewart
Karl A. Stewart, Secretary

98I/3

State of Delaware

37883

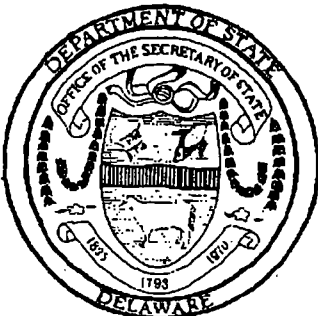


Office of Secretary of State

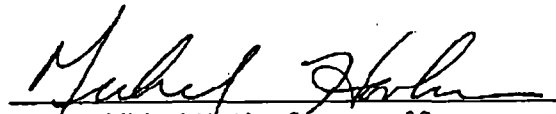
I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING TENNECO MARINE SERVICES INC. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-SECOND DAY OF DECEMBER, A.D. 1988, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

|||||



888357188


Michael Harkins, Secretary of State

AUTHENTICATION: 11985197

DATE: 12/22/1988

TGP0004237
TGP0004237
EPR0001290

FILED

DEC 22 1968

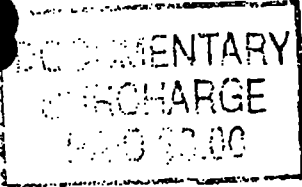
10 AM

CERTIFICATE OF

OWNERSHIP AND MERGER

MERGING TENNECO MARINE SERVICES, INC.

INTO TENNECO OIL COMPANY



TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of Tenneco Marine Services, Inc., a Delaware corporation.

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of Tenneco Oil Company, by written consent, adopted the following resolutions to merge Tenneco Marine Services, Inc. into Tenneco Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Tenneco Marine Services, Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Tenneco Marine Services, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Tenneco Marine Services, Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by C. W. NANCE, its President, and KARL A. STEWART, its Secretary, this 7th day of December, 1988.

TENNECO OIL COMPANY

C. W. Nance
C. W. Nance, President

Karl A. Stewart
Karl A. Stewart, Secretary

RECEIVED FOR RECORD

DEC 27 1988

William M. Honey, Records

TGP0004239
TGP0004239
EPR0001292

State of Delaware

37888



Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF

DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT
COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A
CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF
DELAWARE, MERGING HOUSTON OIL & MINERALS U.K., INC. A CORPORATION
ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF TEXAS,
PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE
STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE
TWENTY-SECOND DAY OF DECEMBER, A.D. 1988, AT 10:01 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID
CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF
DELAWARE.

: : : : : : : :



888357109

A handwritten signature of Michael Harkins in cursive script.

Michael Harkins, Secretary of State

AUTHENTICATION: 1985313

DATE: 12/22/1988

TGP0004240
TGP0004240
EPR0001293

CERTIFICATE OF

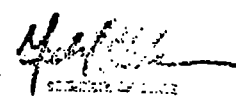
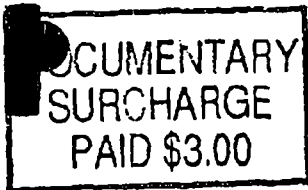
OWNERSHIP AND MERGER

MERGING HOUSTON OIL & MINERALS U.K., INC.

INTO TENNECO OIL COMPANY

FILED

DEC 22 1988

10:01
Am
SECRETARY OF STATE

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of Houston Oil & Minerals U.K., Inc., a Texas corporation.

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of Tenneco Oil Company, by written consent, adopted the following resolutions to merge Houston Oil & Minerals U.K., Inc. into Tenneco Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Houston Oil & Minerals U.K., Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Houston Oil & Minerals U.K., Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Houston Oil & Minerals U.K., Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by C. W. NANCE, its President, and KARL A. STEWART, its Secretary, this 7th day of December, 1988.

TENNECO OIL COMPANY

C. W. Nance
C. W. Nance, President

Karl A. Stewart
Karl A. Stewart, Secretary

RECEIVED FOR RECORD

DEC 27 1988

William M. Honey, Recorder

TGP0004242
TGP0004242
EPR0001295

State of Delaware

37887

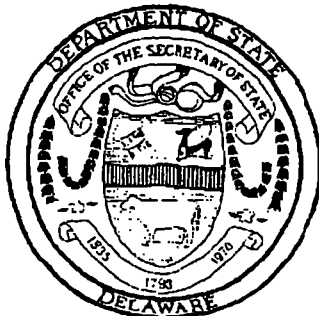


Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING LA TERRE PETROLEUM (U.K.), INC. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-SECOND DAY OF DECEMBER, A.D. 1988, AT 10:02 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

: : : : : : : :



888357118

A handwritten signature of Michael Harkins, Secretary of State, written in ink over a horizontal line.

Michael Harkins, Secretary of State

AUTHENTICATION: 1985756

DATE: 12/23/1988

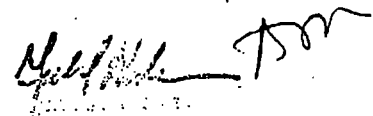
TGP0004243
TGP0004243
EPR0001296

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FILED

DEC 22 1988

10:02



DOCUMENTARY
SURCHARGE
PAID \$3.00

CERTIFICATE OF

OWNERSHIP AND MERGER

MERGING LA TERRE PETROLEUM (U.K.), INC.

INTO TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of La Terre Petroleum (U.K.), Inc., a Delaware corporation.

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of Tenneco Oil Company, by written consent, adopted the following resolutions to merge La Terre Petroleum (U.K.), Inc. into Tenneco Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary La Terre Petroleum (U.K.), Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said La Terre Petroleum (U.K.), Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said La Terre Petroleum (U.K.), Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

TGP0004244
TGP0004244
EPR0001297

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by C. W. NANCE, its President, and KARL A. STEWART, its Secretary, this 7th day of December, 1988.

TENNECO OIL COMPANY

C. W. Nance
C. W. Nance, President

Karl A. Stewart
Karl A. Stewart, Secretary

RECEIVED FOR RECORD
DEC 27 1988
William M. Honey, Recorder.

TGP0004245
TGP0004245
EPR0001298

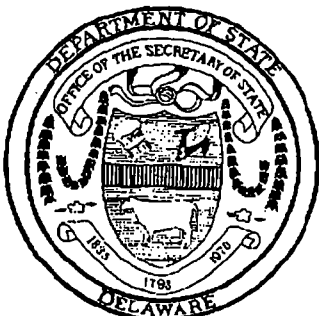


Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING HOUSTON OIL INTERNATIONAL, INC. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF TEXAS, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-SIXTH DAY OF APRIL, A.D. 1989, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

1 1 1 1 1 1 1 1 1 1



729116055

Michael Harkins, Secretary of State

AUTHENTICATION: 12159601

DATE: 04/26/1989

TGP0004246
TGP0004246
EPR0001299

CERTIFICATE OF
OWNERSHIP AND MERGER
MERGING
HOUSTON OIL INTERNATIONAL, INC.
INTO
TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of Houston Oil International, Inc., a Texas corporation.

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of Tenneco Oil Company, by written consent, adopted the following resolutions to merge Houston Oil International, Inc. into Tenneco Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Houston Oil International, Inc. and assume all of said corporation's liabilities and obligations; and it is further

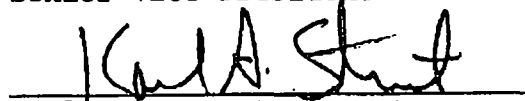
RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger and Articles of Merger setting forth a copy of the resolutions to merge said Houston Oil International, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Houston Oil International, Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the States of Delaware and Texas, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by E. J. MILAN, its Senior Vice President, and KARL A. STEWART, its Secretary, this 18th day of April, 1989.

TENNECO OIL COMPANY



E. J. Milan,
Senior Vice President



Karl A. Stewart, Secretary

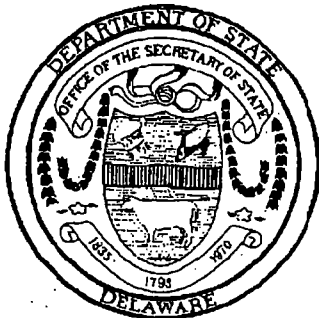
30.TOC



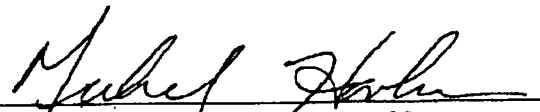
Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF
DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT
COPY OF THE CERTIFICATE OF AMENDMENT OF TENNECO OIL COMPANY FILED
IN THIS OFFICE ON THE EIGHTH DAY OF SEPTEMBER, A.D. 1989, AT 10.
O'CLOCK A.M.

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899251083


Michael Harkins, Secretary of State

AUTHENTICATION: 2332290

DATE: 09/08/1989

TGP0004249
TGP0004249
EPR0001302

CERTIFICATE OF AMENDMENT OF
CERTIFICATE OF INCORPORATION OF
TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Company"), DOES HEREBY CERTIFY:

FIRST: That the Board of Directors of the Company, by Unanimous Written Consent dated as of August 18, 1989, adopted a resolution setting forth a proposed Amendment to the Certificate of Incorporation of the Company, declaring said Amendment to be advisable. The resolution setting forth the proposed Amendment is as follows:

"RESOLVED, that the Certificate of Incorporation of the Company be amended by deleting in its entirety Article FOURTH thereof, and by inserting in lieu thereof the provision hereinafter set forth so that the said Article FOURTH shall be and read as follows:

"FOURTH. (a) The total number of shares which the corporation shall have authority to issue is Two Hundred (200); and the Par Value of each of said shares is Five Dollars (\$5.00), amounting in the aggregate to One Thousand Dollars (\$1,000)."


SECOND: That thereafter, the said Amendment has been consented to and authorized by the holder of all the issued and outstanding stock entitled to vote thereon by a written Consent given in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware and filed with the Company on August 18, 1989.

THIRD: That said Amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

FOURTH: That, at the time this Certificate of Amendment becomes effective in accordance with the laws of the State of Delaware, each of the heretofore issued and outstanding shares of the Company's Common Stock, \$5 par value per share (the "Old Shares"), shall be and become converted automatically (at the rate of 1 New Share, as hereinafter defined, for each 5,000 Old Shares outstanding at the time of the effectiveness of this Certificate of Amendment), by virtue of the effectiveness of this Certificate of Amendment and without any action on the part of the holder of such Old Shares, into shares of the Company's Common Stock, \$5 par value per share (the "New Shares").

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused this Certificate to be signed by its Vice President, and its corporate seal to be hereunto affixed and attested by its corporate Secretary, this 18th day of August, 1989.

TENNECO OIL COMPANY

By: 
Peter Menikoff,
Vice President

By: 
Karl A. Stewart, Secretary

3.TOC

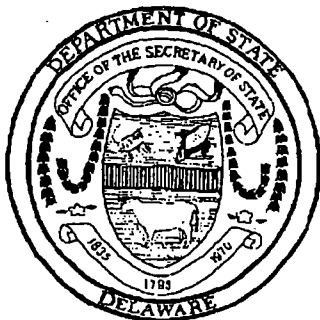


Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING CALDYNE, INC. AND SHIP CHANNEL CHEMICALS COMPANY AND TENNECO STORAGE CAPITAL CORPORATION CORPORATIONS ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE EIGHTH DAY OF SEPTEMBER, A.D. 1989, AT 10:01 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

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899251084

Michael Harkins, Secretary of State

AUTHENTICATION: 2332388

DATE: 89/08/1989

TGP0004252
TGP0004252
EPR0001305

CERTIFICATE OF
OWNERSHIP AND MERGER
MERGING
CALDYNE, INC.
SHIP CHANNEL CHEMICALS COMPANY
AND
TENNECO STORAGE CAPITAL CORPORATION
INTO
TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of:

Caldyne, Inc., a Delaware corporation;

Ship Channel Chemicals Company, a Delaware corporation;
and

Tenneco Storage Capital Corporation, a Delaware Corporation

(herein collectively referred to as the "Companies").

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of Tenneco Oil Company, by written consent, adopted the following resolutions to merge each of the Companies into Tenneco Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Caldyne, Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Caldyne, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Caldyne, Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

* * *

TGP0004253
TGP0004253
EPR0001306

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Ship Channel Chemicals Company and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Ship Channel Chemicals Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Ship Channel Chemicals Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

* * *

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Tenneco Storage Capital Corporation and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Tenneco Storage Capital Corporation into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Tenneco Storage Capital Corporation, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate

to be signed by Peter Menikoff, its Vice President, and Karl A. Stewart, its Secretary, this 18th day of August, 1989.

TENNECO OIL COMPANY

By:

Peter Menikoff
Peter Menikoff, Vice President

Karl A. Stewart
Karl A. Stewart, Secretary

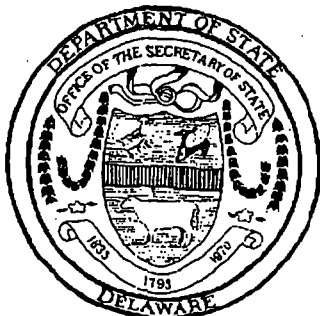
4.TOC



Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING HOUSTON OIL & MINERALS OF DUBAI, INC. AND HOUSTON OIL & MINERALS OF THE NETHERLANDS, INC. AND TENNECO OIL TRADING COMPANY CORPORATIONS ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF TEXAS, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE EIGHTEENTH DAY OF SEPTEMBER, A.D. 1989, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.



729261051

Handwritten signature of Michael Harkins.
Michael Harkins, Secretary of State

AUTHENTICATION:

12341455

DATE:

09/18/1989

TGP0004256
TGP0004256
EPR0001309

CERTIFICATE OF
OWNERSHIP AND MERGER
MERGING

HOUSTON OIL & MINERALS OF DUBAI, INC.,
HOUSTON OIL & MINERALS OF THE NETHERLANDS, INC.
AND
TENNECO OIL TRADING COMPANY
INTO
TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of:

Houston Oil & Minerals of Dubai, Inc., a Texas corporation;

Houston Oil & Minerals of the Netherlands, Inc., a Texas corporation; and

Tenneco Oil Trading Company, a Texas Corporation
(herein collectively referred to as the "Companies").

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of Tenneco Oil Company, by written consent, adopted the following resolutions to merge each of the Companies into Tenneco Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Houston Oil & Minerals of Dubai, Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger and Articles of Merger setting forth a copy of the resolutions to merge said Houston Oil & Minerals of Dubai, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Houston Oil & Minerals of Dubai, Inc., and to cause the same to be filed, in the manner provided by law, and to do all

acts and things whatsoever, whether within or without the States of Delaware and Texas, which may be in anywise necessary or proper to effect said merger.

* * *

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Houston Oil & Minerals of the Netherlands, Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger and Articles of Merger setting forth a copy of the resolutions to merge said Houston Oil & Minerals of the Netherlands, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Houston Oil & Minerals of the Netherlands, Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the States of Delaware and Texas, which may be in anywise necessary or proper to effect said merger.

* * *

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Tenneco Oil Trading Company and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger and Articles of Merger setting forth a copy of the resolutions to merge said Tenneco Oil Trading Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Tenneco Oil Trading Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the States of Delaware and Texas, which may be in anywise necessary or proper to effect said merger.

- 2 -

TGP0004258
TGP0004258
EPR0001311

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by Peter Menikoff, its Vice President, and Karl A. Stewart, its Secretary, this 18th day of August, 1989.

TENNECO OIL COMPANY
By: Peter Menikoff
Peter Menikoff, Vice President
Karl A. Stewart
Karl A. Stewart, Secretary

7.TOC

34070

BOOK

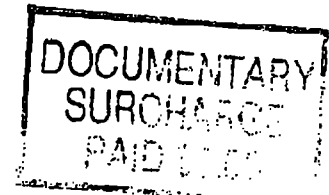
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PAGE 1

State of Delaware

RECEIVED FOR RECORD

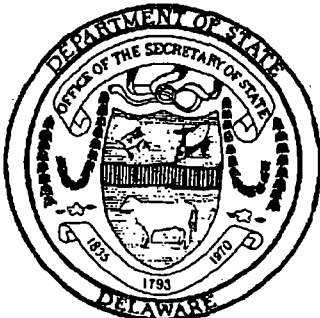
DEC 26 1989

CIVIL & ALABAMA, Recorder

**Office of Secretary of State**

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING HOUSTON ROYALTY COMPANY A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF NEVADA, HOUSTON PRODUCTION COMPANY A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF TEXAS, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-FIRST DAY OF DECEMBER, A.D. 1989, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.



729355069

Michael Harkins, Secretary of State

AUTHENTICATION: 12461317

DATE: 12/21/1989

TGP0004260
TGP0004260
EPR0001313

729355069
 CERTIFICATE OF
 OWNERSHIP AND MERGER
 MERGING
 HOUSTON PRODUCTION COMPANY
 AND
 HOUSTON ROYALTY COMPANY
 INTO
 TENNECO OIL COMPANY

FILED

OED 21 1989

[Signature]
 SECRETARY OF STATE

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of Houston Production Company, a Texas corporation, and Houston Royalty Company, a Nevada corporation.

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of Tenneco Oil Company, by written consent, adopted the following resolutions to merge Houston Production Company and Houston Royalty Company, respectively, into and with Tenneco Oil Company:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly owned subsidiary Houston Production Company and assume all of said corporation's liabilities and obligations; and it is further

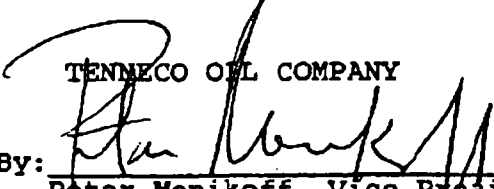
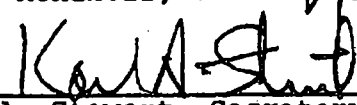
RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger and Articles of Merger setting forth a copy of the resolutions to merge said Houston Production Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Houston Production Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the States of Delaware and Texas, which may be in anywise necessary or proper to effect said merger.

* * *

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Houston Royalty Company and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger and Articles of Merger setting forth a copy of the resolutions to merge said Houston Royalty Company into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Houston Royalty Company, and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the States of Delaware and Nevada, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by Peter Menikoff, its Vice President, and Karl A. Stewart, its Secretary, this 30th day of November, 1989.

TENNECO OIL COMPANY
By: 
Peter Menikoff, Vice President

Karl A. Stewart, Secretary

22.TOC

State of Delaware



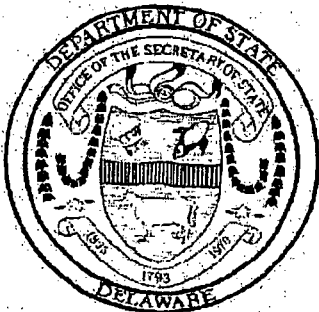
Office of Secretary of State

I, MICHAEL RATCHFORD, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP OF TENNECO OIL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, MERGING OPERATORS, INC. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, PURSUANT TO SECTION 253 OF THE GENERAL CORPORATION LAW OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTIETH DAY OF JULY, A.D. 1992, AT 10 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CORPORATION SHALL BE GOVERNED BY THE LAWS OF THE STATE OF DELAWARE.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE APPROPRIATE COUNTY RECORDER OF DEEDS FOR RECORDING.

* * * * *



722202093

Michael Ratchford, Secretary of State

*3524836

AUTHENTICATION:

DATE:

07/20/1992

TGP0004263
TGP0004263
EPR0001316

CERTIFICATE OF
OWNERSHIP AND MERGER MERGING
OPERATORS, INC.
INTO AND WITH
TENNECO OIL COMPANY

TENNECO OIL COMPANY, a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That it is the owner of all the issued and outstanding stock of OPERATORS, INC., a Delaware corporation, incorporated on June 19, 1972.

SECOND: That, in accordance with the provisions of Section 141(f) of the General Corporation Law of the State of Delaware, the Board of Directors of TENNECO OIL COMPANY, by written consent dated as of July 13, 1992, adopted the following resolutions to merge OPERATORS INC. into and with TENNECO OIL COMPANY:

RESOLVED, that the Company merge into itself and it hereby does merge into itself its wholly-owned subsidiary Operators, Inc. and assume all of said corporation's liabilities and obligations; and it is further

RESOLVED, that the proper officers of the Company be, and they hereby are, authorized, empowered and directed to execute, under the corporate seal of the Company, a Certificate of Ownership and Merger setting forth a copy of the resolutions to merge said Operators, Inc. into the Company, pursuant to which the Company will assume all of the liabilities and obligations of the said Operators, Inc., and to cause the same to be filed, in the manner provided by law, and to do all acts and things whatsoever, whether within or without the State of Delaware, which may be in anywise necessary or proper to effect said merger.

IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused its corporate seal to be hereunto affixed and this Certificate to be signed by E. J. Milan, its President, and Karl A. Stewart, its Secretary, as of July 13, 1992.

TENNECO OIL COMPANY

BY:

E. J. Milan
E. J. Milan, President

ATTEST

Karl A. Stewart
Karl A. Stewart, Secretary

7.MRG

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "TENNECO OIL COMPANY", CHANGING ITS NAME FROM "TENNECO OIL COMPANY" TO "EPEC OIL COMPANY", FILED IN THIS OFFICE ON THE TWENTY-FOURTH DAY OF DECEMBER, A.D. 1996, AT 10 O'CLOCK A.M.

A CERTIFIED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS FOR RECORDING.



Edward J. Freel, Secretary of State

0548802 8100

960384033

AUTHENTICATION:

8262125

DATE:

12-27-96

TGP0004266
TGP0004266
EPR0001319

CERTIFICATE OF AMENDMENT
OF
CERTIFICATE OF INCORPORATION

TENNECO OIL COMPANY (the "Company"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That the Board of Directors of the Company, by the unanimous written consent of its members, filed with the minutes of the Board, adopted a resolution proposing and declaring advisable the following amendment to the Certificate of Incorporation of the Company:

RESOLVED that it is deemed advisable that the Certificate of Incorporation of this Company be amended, and that said Certificate of Incorporation be so amended, by changing the Article thereof numbered "FIRST" so that, as amended, said Article shall be and read as follows:

"FIRST

The name of the corporation is EPEC OIL COMPANY."

SECOND: That in lieu of a meeting and vote of stockholders, the stockholders entitled to vote have given unanimous written consent to said amendment in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

THIRD: That the aforesaid amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of the State of Delaware.

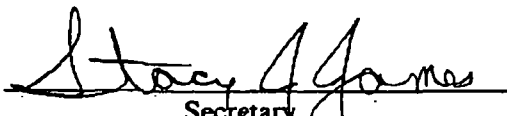
IN WITNESS WHEREOF, said TENNECO OIL COMPANY has caused this certificate to be signed on its behalf by its Senior Vice President and attested by its Secretary, this 12th day of December 1996.

TENNECO OIL COMPANY



Senior Vice President
H. Brent Austin

Attest:


Secretary
Stacy J. James

TGP0004267
TGP0004267
EPR0001320